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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY  
MITCHELL BROS. COMPANY  
(INCORPORATED).

VOL. XXI.

CHICAGO, ILLINOIS, DECEMBER 15, 1902.

No. 6.

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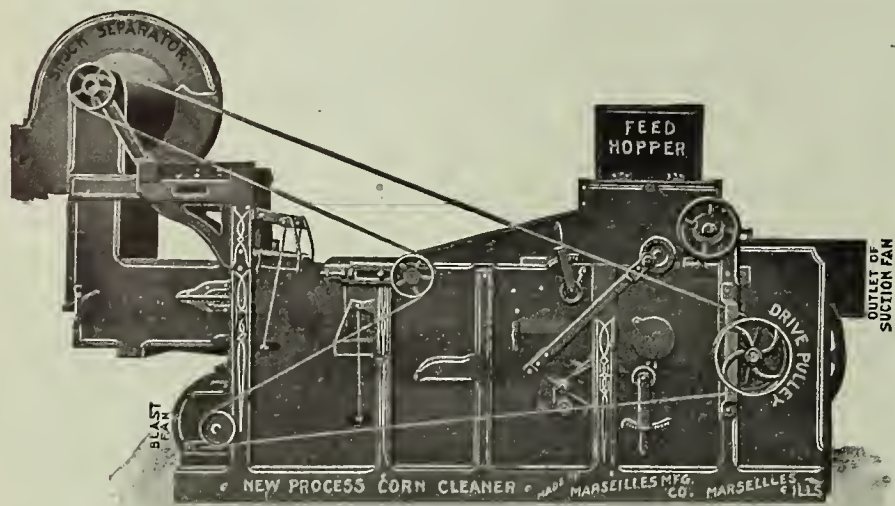
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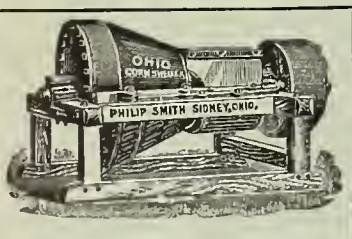
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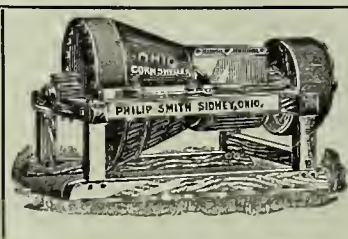
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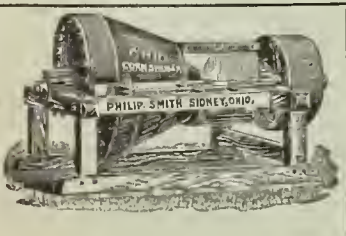
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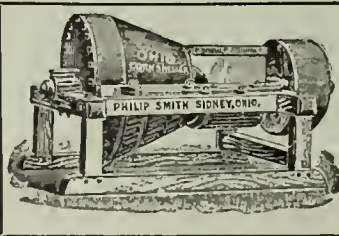
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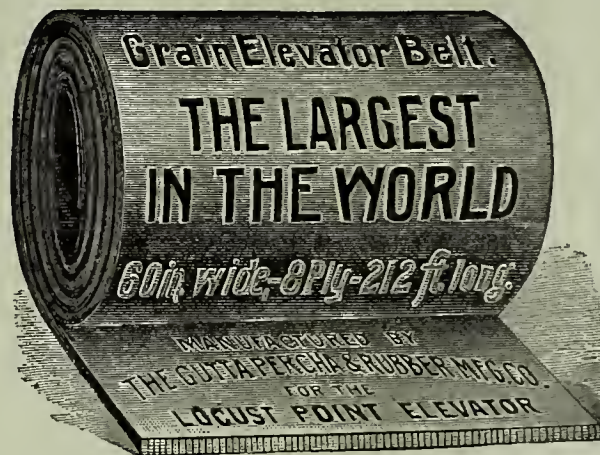


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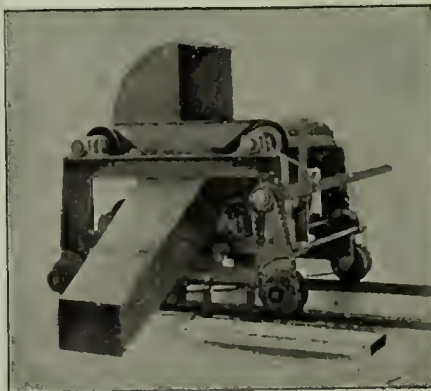
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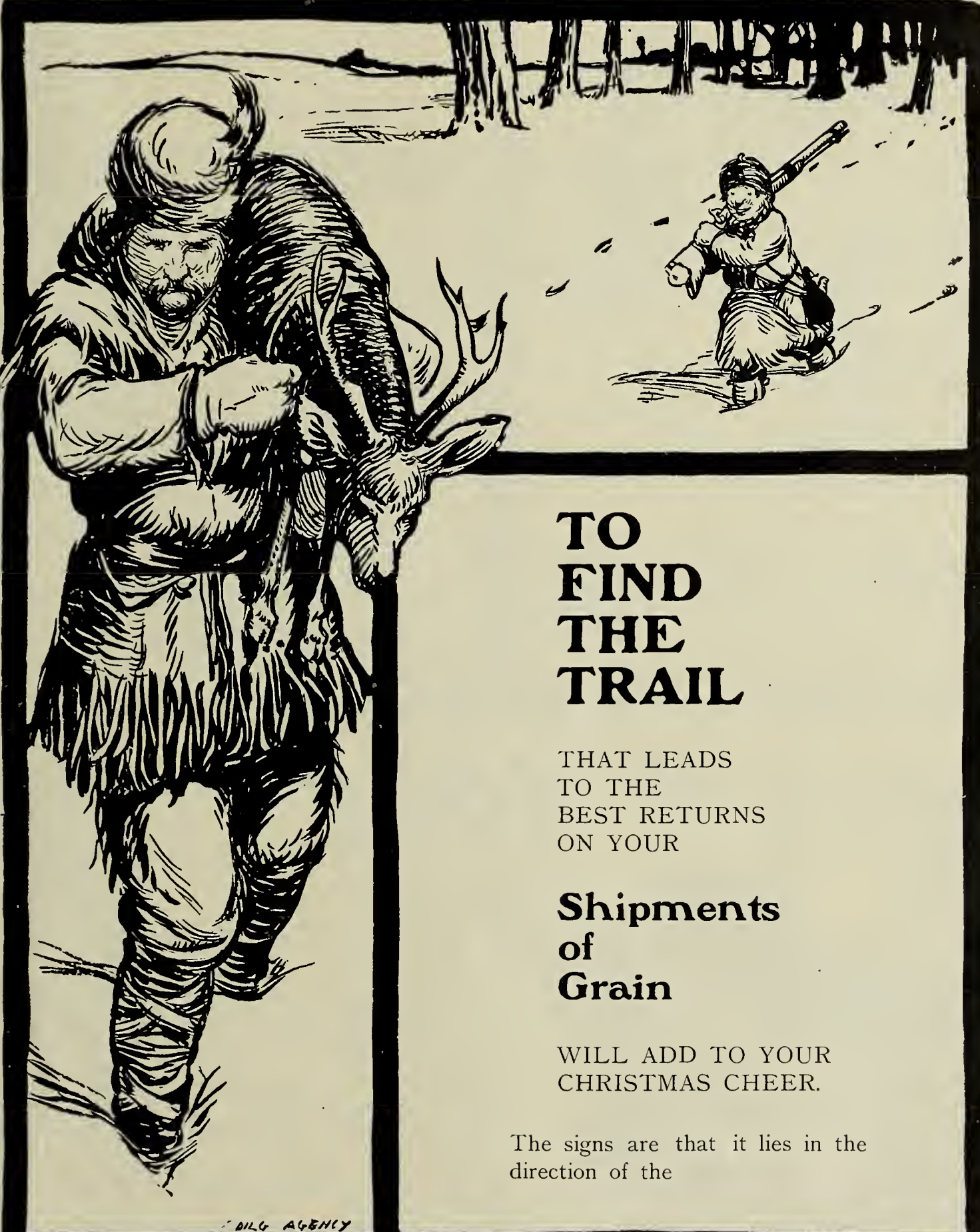
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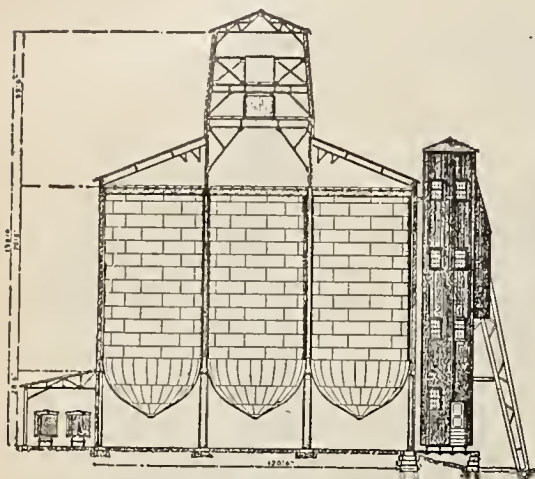
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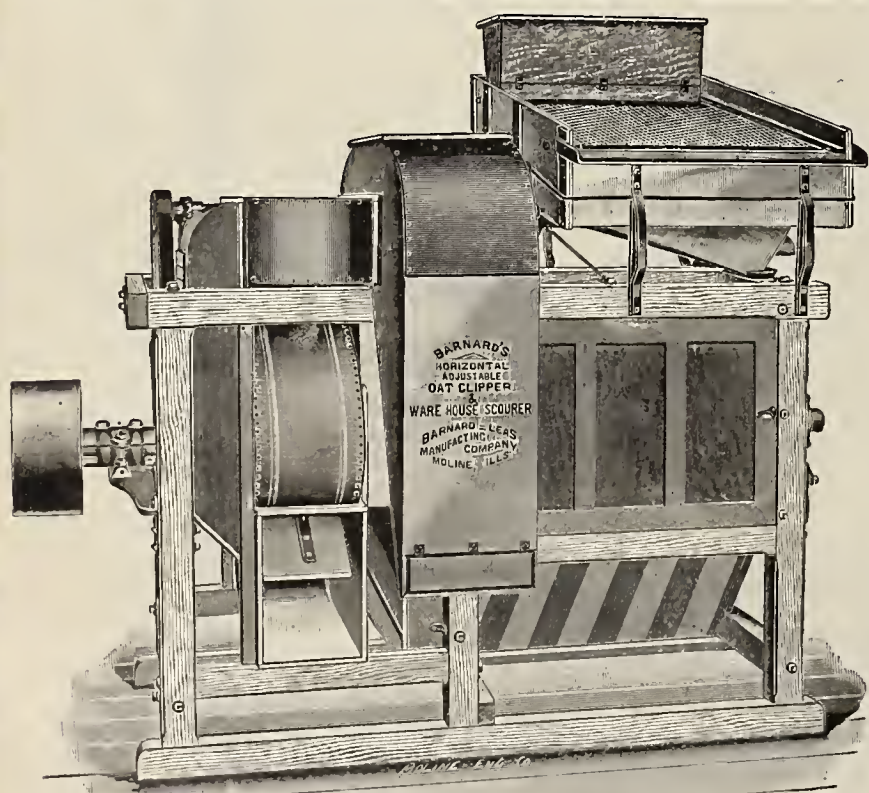
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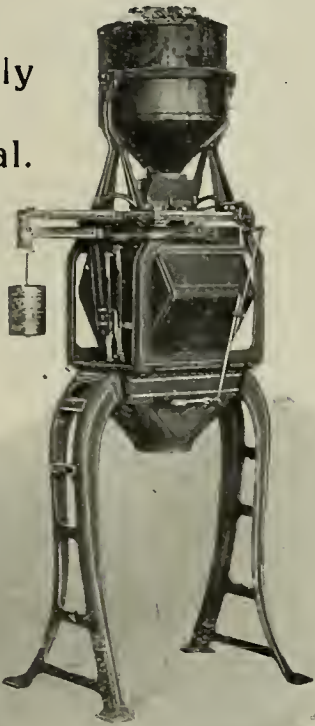
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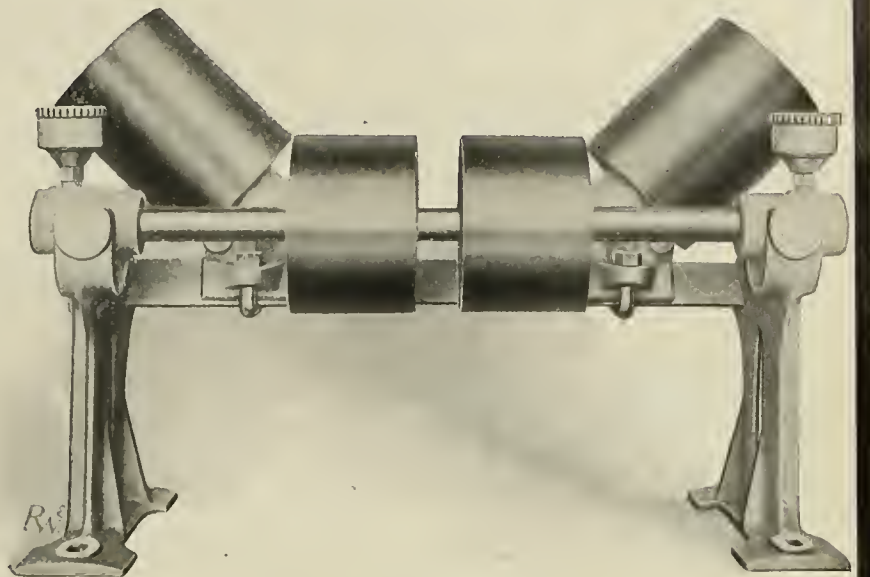
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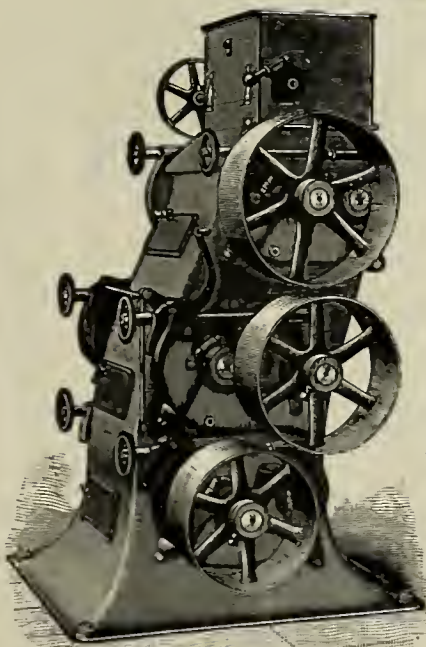
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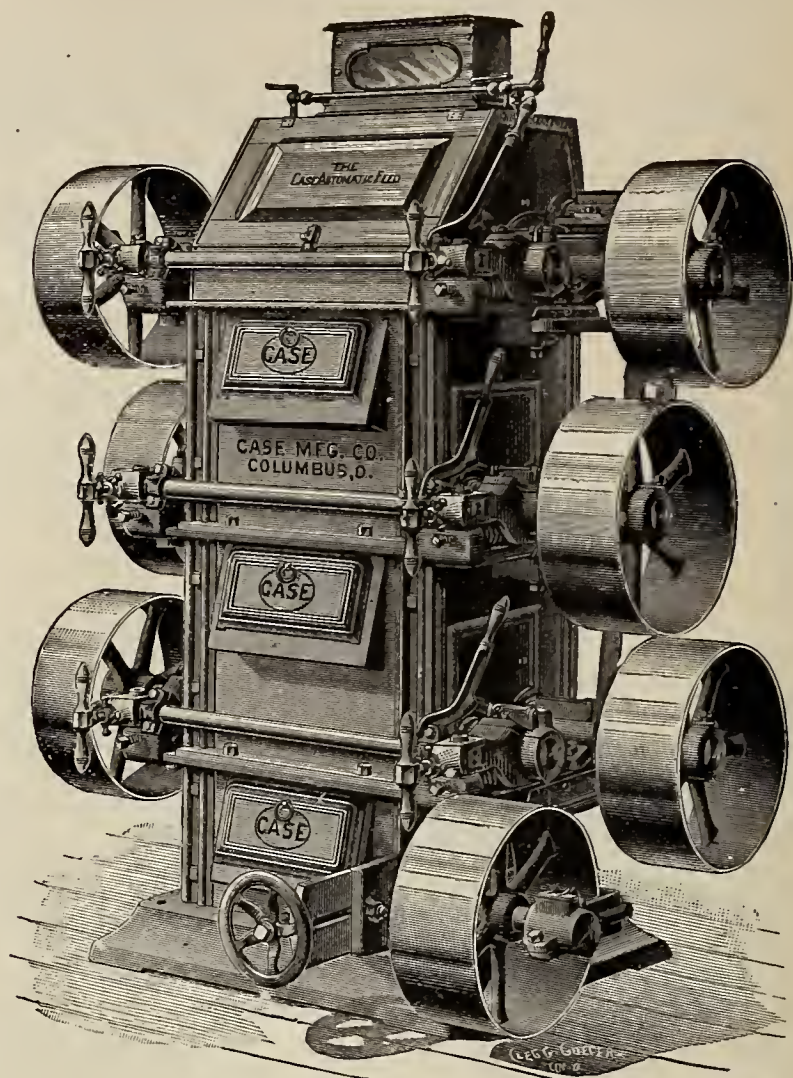
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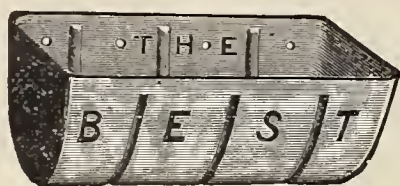
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Specialties for  
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CONVEYOR; with Flight of One  
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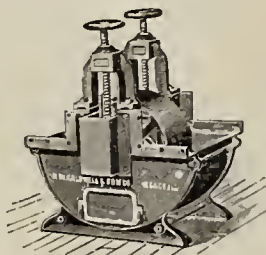
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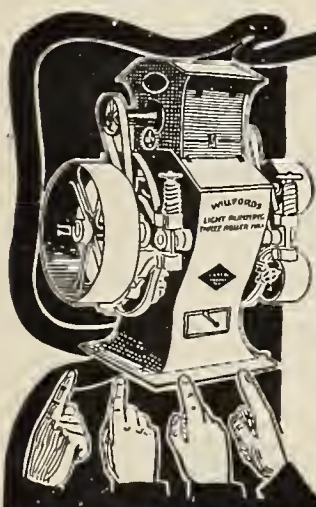
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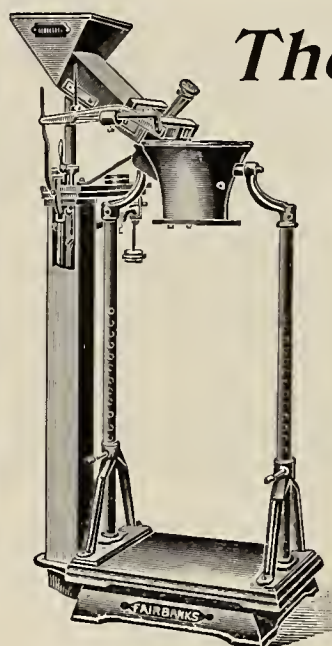
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FOR WEIGHING AND BAGGING  
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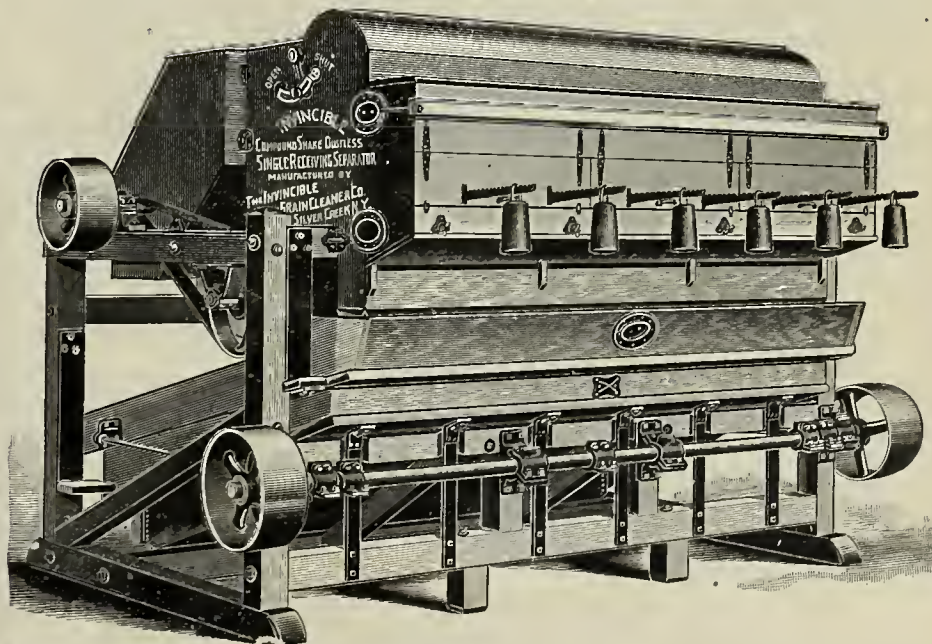
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They never shake the building but stand as steady as a rock.  
Their work is perfect.  
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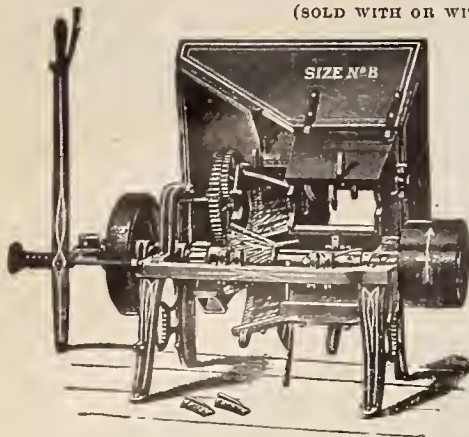
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Power Transmission, Gas Engines. Steam Engines and Boilers.  
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It leaves the Wheat in Perfect Condition for the Rolls. Will also dry  
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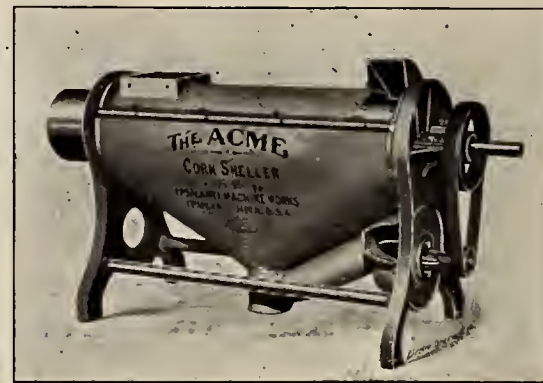
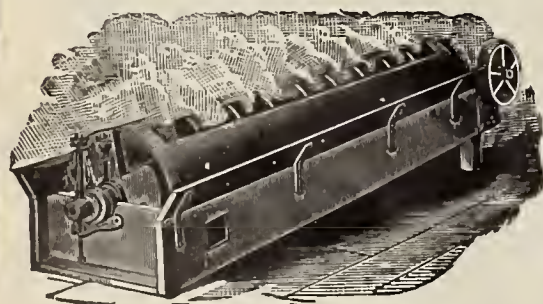
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ALSO SAND, COAL DUST, GRAPHITE AND CLAY AND ORE OF ALL KINDS!

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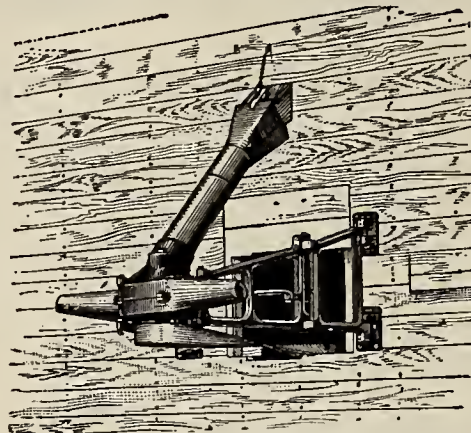


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Loads any size car from end to  
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wheat, oats or rye from 2,500 to  
3,000 bushels per hour, with but very  
little power required to operate.

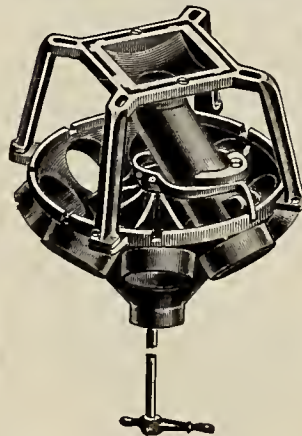
Will not crack or grind the grain.

Sold subject to 30 days' trial.

Write for Catalogue giving full particulars.

**The Ideal Car Loader Co.,** Allenville, Ill.

## The Improved Hall Automatic Overflow Signalling Grain Distributor



Is unrivalled and unapproached by any known device for  
grain distribution in the world. All the distributors save  
only this mix grain in the process of distribution. Mixing  
grain is wasting money and it is the most wasteful feature  
in the grain business. The dockage at destination sums it  
up with unerring accuracy and is a part of the COST OF  
YOUR DISTRIBUTOR. Our device is

SIMPLE, ACCURATE, POSITIVE, ECONOMICAL,  
EFFICIENT, DURABLE, PERFECT.

Illustrated descriptive booklet mailed upon request. Send for  
one and be convinced.

**HALL DISTRIBUTOR CO.,**

506 First National Bank Bldg., OMAHA, NEB.



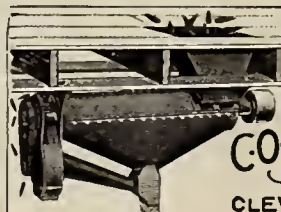
This Man  
Has  
Troubles.  
You can  
Reduce  
Yours by  
Using

## The Spear Sample Envelope.

When you send your grain samples in these  
envelopes you have the assurance that it  
will arrive safely at destination.

Easily and Securely Fastened.

**Heywood Manufacturing Co.**  
MINNEAPOLIS, MINN.



TRIUMPH  
POWER  
CORN SHELDER  
**CO. BARTLETT  
& Co.**  
CLEVELAND O.

## JEFFREY CHAIN AND RUBBER BELT CONVEYORS

NEW CHAIN CATALOGUE  
No. 72 NOW READY.  
SEND FOR COPY

Our machinery can be adapted to the  
handling of material of all kinds, bulk or  
package, any size, any distance.

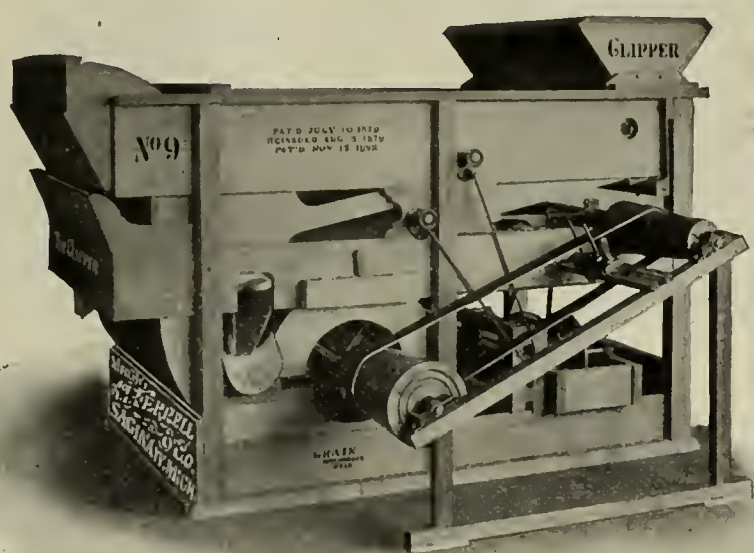
ADDRESS US BEFORE  
PURCHASING



Jeffrey Detachable Chain.

**THE JEFFREY MFG. CO.,**  
COLUMBUS, OHIO, U. S. A.  
NEW YORK. DENVER





**No. 9 SPECIAL CLIPPER CLEANER**  
With Traveling Brushes and Special Air Controller

## The Clipper Special Corn Cleaner

**T**HIS Cleaner is especially adapted to handling all varieties of field and sweet corn.

The Air Controller provides for an extra strong, heavy blast, which is regulated to carry off all chaffy, shrunken kernels and all husks, silks, pieces of cob, etc.

The Perforated Zinc Screens are selected to take out all "bullhead" or "tip" grains if desired, leaving a high grade of corn.

The Traveling Brushes keep the screens clear, adding to the results obtained and increasing the capacity of the Cleaner.

This machine will require less than two horsepower for cleaning corn or other grain and has no equal for elevators of medium capacity.

The Clipper Cleaner is easy to install, simple to operate, and gives the very best results. Write for our sample Plate of Perforations and Catalogue.

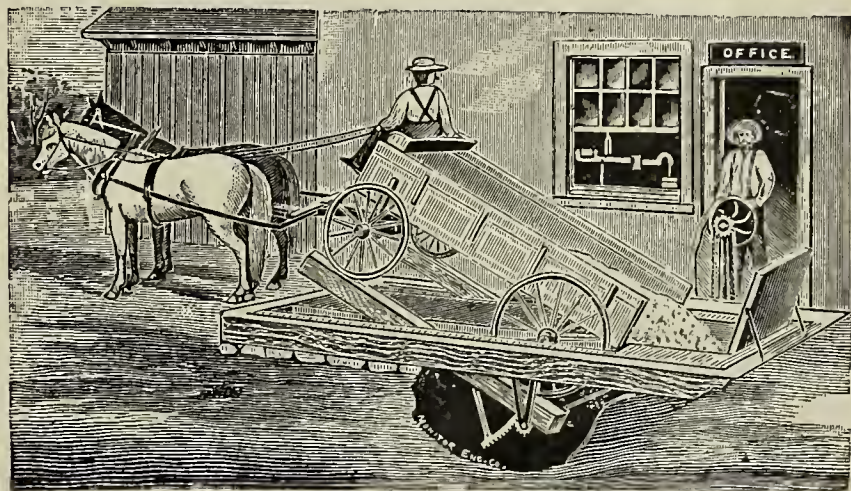
**A. T. FERRELL & CO., SAGINAW, MICH.**

## DRYING GRAIN BY NATURE'S OWN METHOD

Means something more than merely kiln drying it. It means the putting of every kernel into its normal condition. You can do this, but only in a Paine-Ellis Drier. It will handle with equal facility grain containing 50 per cent moisture to that simply damp and musty. It will operate successfully and rapidly at a temperature as low as 110 degrees; a point that practical millers and elevator men will appreciate. Adapted to a wide range of usefulness. Millions of bushels successfully handled annually. Write us for particulars. :: ::

**The Paine-Ellis Grain Drier Co.**  
53 Chamber of Commerce, Milwaukee, Wis.

## Gold Dollars



At FIFTY CENTS apiece are CHEAP, but they do not represent a better investment than we offer the "elevator and grain trade" in our

## Controllable Wagon Dump.

WINCHESTER, ILL., February 4, 1896.

**MESSRS. SAVAGE & LOVE CO., Rockford, Ill.**

GENTLEMEN:—Your favor of the 28th ult. received and noted. Last July I put one of your Controllable Wagon Dumps in a Fairbanks, Morse & Co.'s 22-ft. scale, and it has given me entire satisfaction in every respect. In this locality the bulk of grain is as yet handled in sacks, and by tipping the Dump about one-half it makes a nice slant, making it very easy to pull the sacks to back end of wagon, where strings are cut and grain runs out into bin below. Every farmer, without exception, speaks in glowing terms of the merits of this Dump. In unloading loose grain from wagon there is no dump that will equal yours in being easily handled and always under control of operator. No scaring horses, no dropping of wagon and no noise. I consider a grain elevator incomplete without the Savage & Love Controllable Wagon Dumps.

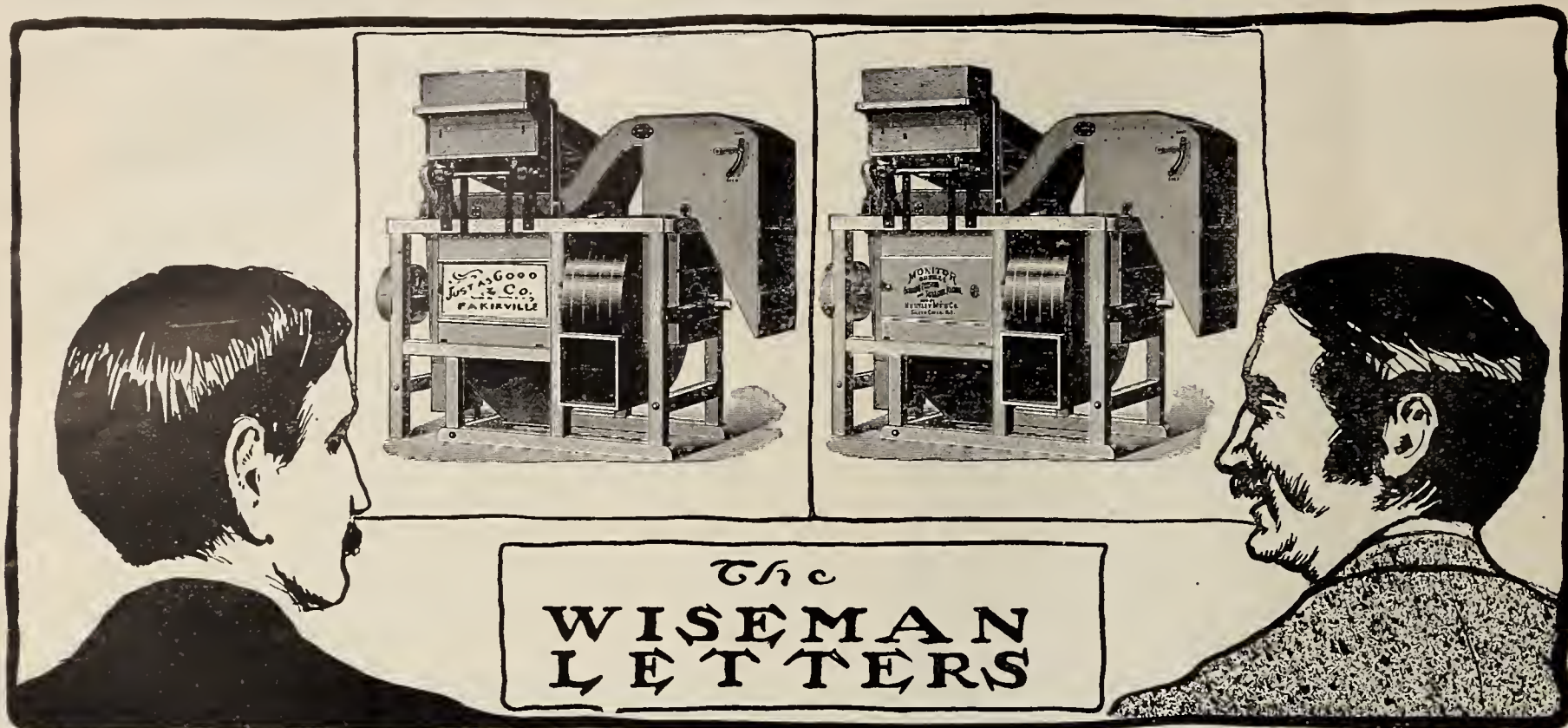
Yours truly,  
M. C. WOODWORTH.

MANUFACTURED ONLY BY

**THE SAVAGE & LOVE CO., Rockford, Ill.**

FAIRBANKS, MORSE & CO., S. Paul, Minn., Northwestern Agents.





## Appearances Are Deceptive.

DEAR JOHN:—

"One swallow does not make a spring," as the old saying goes, and a good coat does not make a gentlemen.

I have just found this out in the Grain Cleaning Machine business. Some months ago I wanted to put some machinery in our grain cleaning department. It got noised about among manufacturers, and I had eight or nine representatives in to see me.

I think it would be generally conceded that the Monitor Machines are the best machines made to-day, but you know how it is when a man comes to buy an article; he does not always look at that article the same way as if he would advise somebody else, and I confess that I was bitten with the idea of saving \$100. The remarkable thing about it is that so many of the machines looked alike. They all seemed to model them on the Monitor Machine, and all the manufacturers seemed to make it their tune that their machines were just as good as the Monitor. I did not pay much attention to this phase of the subject until afterward, and it struck me that it was a pretty good advertisement for the Monitor because I think you will agree with me whenever a man commences to run down a competitor or to claim that his goods are just as good as the competitor's, it is about time you are looking into the validity of the claims of that competitor.

You can't judge a machine by its looks. I had a Huntley catalogue—there was the Monitor Scourer. Well, I do not know whether you will believe me or not, but when I had a picture of the competing machine showed me I could not tell the difference between the two of them to save my life. Just like two grains of wheat. One was priced on the plan of "get what you can." The Monitor people said: "We sell on the basis of results."

I thought I knew a great deal about Grain Cleaning Machinery, so I said: "All right, try the Just-as-Good & Co." The long and short of it is, Do not buy a machine on its appearance; buy it on reputation. I never knew how poor the machine could be until I had Just-as-Good kind in my place.

The Huntley people never make a claim they cannot back up with results. In their Scouring and Separating Machines, for instance, I got three times the amount of scouring that I could get out of any other machine; I got my grain highly polished; I got a smooth, unbroken bran; it left the wheat whole and cost less to run it.

You would not think these things true to look at the machine, but the beauty comes out when you work it.

Yes sir, appearances are mighty deceptive, though, my dear fellow, when you want to buy Grain Cleaning Machinery do not buy of the imitator. He travels on his face. It may cost you a little more money to have the genuine article, but there is a lot more satisfaction in having it.

I may tell you about the little experience I had some day soon.

As ever,  
SAMUEL WISEMAN.

### The Monitor Line Includes:

Monitor Dustless Warehouse and Elevator Separator  
Monitor Dustless Oat Clipper  
Monitor Dustless Warehouse Smutter

And a full line of special grain cleaning machinery for any and all kinds of uses.

# Huntley Manufacturing Co.

Silver Creek, New York.





A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY  
MITCHELL BROS. COMPANY  
(INCORPORATED).

VOL. XXI.

CHICAGO, ILLINOIS, DECEMBER 15, 1902.

No. 6.

{ ONE DOLLAR PER ANNUM,  
SINGLE COPY, TEN CENTS.

### WESTWEGO ELEVATOR "B."

The position of New Orleans in the grain export trade has long since ceased to be problematical; this business of the port is thoroughly established as a permanent factor of her perennially increasing volume of trade. And this is true whether we consider the business of the terminals of the Illinois Central on the right bank of the river, bringing grain from the great northern and northwestern grain fields, or those of the Texas and Pacific on the left bank, whose lines tap the newer but rapidly growing country of the great Southwest. Indeed,

for a few years; but as the volume of business increased, the need of greater facilities became more pressing. Whereupon "Elevator B," as the new house is called, was erected. The elevator system of the terminal, as it exists to-day, is shown in the accompanying engraving, the new house standing in the foreground, and the original "Elevator A" in the distance. Each has its own belt gallery to the river, but the river gallery of the "A" house has been connected with that of the "B" house, making one continuous vessel-loading gallery.

The "B" elevator was completed last April and

making it one of the most extensive export terminals in the country.

The entire elevator system is under the management of Geo. W. Roth as superintendent and W. T. Heim, secretary, both of whom have held these positions for a number of years.

### LAKE BUSINESS LIGHT.

The lake grain shipping season closed on November 30 with the rate at 2c on wheat Chicago to Buffalo, which was 1/8c higher than a year ago. The season has been a poor one for the vessel men



THE TEXAS AND PACIFIC RAILWAY COMPANY'S SYSTEM OF ELEVATORS AT WESTWEGO (NEW ORLEANS), LOUISIANA.

the growth of the Southwestern grain trade may be said to be even more striking, in some respects, than the other.

It is only ten years since the Texas and Pacific Railway Company built (1892) its first elevator at its Westwego terminal, a 350,000-bushel house, as an experiment. It immediately found business coming to it; so that in 1893 it was found necessary to remodel the elevator and provide it with proper facilities for doing business in an American way. When completed, the elevator had three receiving and three shipping legs, a belt gallery to and along the river for 350 feet for loading export grain by belt conveyors of 15,000 bushels' hourly capacity, through nine gallery spouts.

This house served the purposes of the terminal

is, of course, an entirely modern house. Its storage capacity is 1,000,000 bushels, while its unloading capacity is 200 cars daily. It can load into vessels 50,000 bushels per hour, two ships being loaded simultaneously when necessary.

During the progress of constructing this "B" elevator, the "A" elevator was being for a second time remodelled at a cost of \$30,000 to bring it up to date. The combined system, therefore, can unload 300 cars daily and put 75,000 bushels of grain hourly into vessels, both houses with their shipping galleries being worked simultaneously.

In addition to the new elevator, the Railway Company has extended its wharf frontage to 2,200 feet. This space is used for handling cotton and cargo merchandise of all sorts and descriptions,

depending on grain for business. Corn shipments were cut down by last year's crop failure, while the new (1902) crop was unfit to ship during the weeks following harvest.

Up to November 29 the total amount of all grains forwarded from Chicago by lake for the season was 61,324,753 bushels, as compared with 80,574,190 bushels last year, and 132,681,737 bushels for the season of 1900. To this may be added a large increase in vessel tonnage seeking business on the great lakes, which has served to reduce the individual earning power of the boats. If the carriers had not had a record-breaking year of iron ore shipments to fall back on, many would have been obliged to quit early in the season, and perhaps a receivership would have been the fate of many.



## CHICAGO OPEN BOARD.

On December 3 the officials of the Chicago Board of Trade summarily and without notice cut off the quotations hitherto sent to the Chicago Open Board of Trade. The reasons assigned are that the Open Board failed to keep to its agreement not to permit trading in privileges in its rooms, and that its officers have failed to place any restrictions on the actions of some of its members, who are using questionable methods in getting business.

The Open Board has since done business of a fashion by making its own quotations; in the meantime referring the general questions at issue to its attorneys.

The Open Board has a membership of about 100 with the following named officers: President, Charles C. Albertson; vice-president, William Duncan; directors, John Maze, E. E. Powers, J. V. Lampson, M. L. Tankersley, George F. Sullivan. The price of seats fell from \$650 on December 3 to \$250 on December 4.

## THE BUCKLIN-BUTLER ENTERPRISE REORGANIZED.

The Kansas Farmers' Co-operative Grain and Live Stock Association held its annual meeting at Topeka on December 2 and 3.

A new directory was elected, as follows: James Butler, Topeka; J. W. Bucklin, Oakley; C. W. Peckham, Haven; C. B. Hoffman, Enterprise; H. C. Hawkins, Winfield; W. O. Mathas, McPherson; G. E. Smith, Kensington; Robert W. Smith, Delphos, and J. G. Geisick, Bison.

The following officers were elected by the directory, who are the same as for last year, to-wit: J. A. Bucklin of Oakley, president; C. N. Peckham of Haveland, vice-president; James Butler of Topeka, secretary; S. H. Allen of Topeka, treasure.

The real business of the meeting, as the Capital says, was to reorganize the company so as to bring as many independent elevators as possible under the management of the association. "The greater part of the time was spent in amending the by-laws so as to enable the association to do a bigger business. The company will be reorganized under a special capital stock of \$200,000, which is much larger than the present stock, and under the laws of some other state so as to avoid the provisions of the double liability law. Provision will also be made so that one person can take out as much as \$3,000 in stock, which is a much larger amount than could be taken out under the old organization."

## STATE WEIGHING IN MINNESOTA.

The annual report of P. P. Quist, state weighmaster of Minnesota, for the year ending August 31, was made public on November 22. The report says that the total number of bushels of grain weighed during the year was 191,848,155.

The report shows that six new elevators have been added to the jurisdiction of the department during the year, these including the Electric Steel, the Minnehaha, Mississippi, St. Anthony No. 3, the Steward and North Star Malting Company's elevators. Several others are under construction that will shortly require the attention of the weighmaster.

A deficit is reported of \$4,005.73, due to a decline of 13,435 in the number of cars weighed, with a corresponding decrease in fees, at the same time the number of places where weighing has been done has increased, necessitating the employment of additional weighers. In an effort to comply with the direction of the law that the service shall be self-supporting, state weighing has been suspended at three yards since Sept. 1, 1902, because at the stations so discontinued the total fees derived from weighing were but \$1,254.40, while the disbursements for wages were \$2,772, leaving a deficit of \$1,517.

With regard to the car sweeping evil, for the abolition of which strenuous efforts have been made by the department, the report states that great prog-

ress has been made and that with future coöperation by the state legislature the difficulty may be entirely eradicated. The total expense of the crusade against car sweepers is placed at \$4,000, which has been more than made up by the savings to the shippers. Shortage claims have fallen off 50 per cent as a result of the crusade. During the year ending Aug. 31, 1901, there were 1,634 claims for shortage, while during the past year there have been but 779.

Another feature of the report which indicates causes of waste is that showing the number of cars received in Minneapolis in a leaky condition. It is shown that of 223,127 cars received, 20,214 were in bad order. There were 4,807 that leaked in the body, 9,262 that had leaky doors, 2,899 were without seals, 1,925 had doors open, and 1,321 had broken seals.

## C. A. FOSTER.

Pittsburgh, Pa., is one of the most important consumers of hay, grain and feed, as well as distributors of these products to consumers and interior dealers, in this country, and the total volume of its business is something enormous. Naturally,



C. A. FOSTER, PITTSBURG, PA.

therefore, the trade has attracted the attention of a number of commission and wholesale merchants whose business character and commercial methods have done much to make that market attractive to the western shipper.

Among the older grain and hay merchants of what may be called the "Greater Pittsburgh" is C. A. Foster of Carnegie and Pittsburgh. Mr. Foster, who was born at Carnegie (formerly Mansfield), Pa., on September 6, 1858, has been in the business since 1878, when he began handling grain at Carnegie. He was quite successful and soon added a wholesale department at Pittsburgh; and during the succeeding twenty or more years he continued the business in that way—retail at Carnegie and wholesale at Pittsburgh, with head office at Carnegie. Of late, however, his wholesale business has developed to such an extent that a Pittsburgh office has become a necessity and he has secured quarters in the McCance Block in the heart of the business district at the corner of Seventh Avenue and Smithfield Street, where he will be glad to have grain consigners and shippers call on him.

Mr. Foster is a member of the Grain Dealers' National Association, the Ohio Grain Dealers' Association and the National Hay Association.

A farmer in Pleasant Ridge Tp., Livingston County, recently delivered to a near-by elevator for storage 8,000 bushels of corn grown during the past six years. During that time he might have sold what he had on hand for 70 cents, but held it, and even now stores to hold indefinitely, waiting for "better prices."

## REPORT ON GRAIN.

Carl S. Schofield, special agent of the Agricultural Department, is visiting the leading grain markets to collect materials for the preparation of an illustrated report giving a complete and detailed history and account of our cereals from the time the seed is sown until it is matured and the grain finally reaches the consumer. All the scientific equipments of the Department of Agriculture will be used to make the proper analysis covering quality of grain, the effects of atmospheric changes and every possible cause that enures to the injury of grain during growth, curing and transportation and the storage periods, as well as the necessary treatment and care to be used in satisfactory and successful exporting of grain.

Mr. Schofield has been in Africa, Egypt, Japan, Russia, China, India and throughout continental Europe and Great Britain investigating this subject from every possible standpoint, and will visit every grain city and center of the United States and Canada before he begins the compilation of this governmental report.

## CROP YEAR 1901-02 IN MINNESOTA.

Chief Grain Inspector F. W. Eva of Minnesota on November 25 filed with the State Railroad and Warehouse Commission his report for the crop year ending August 31, 1902, being the seventeenth annual report of the inspection department.

The report covers the work of the department in Minneapolis, Duluth, St. Paul, St. Cloud and New Prague, at which five points the department inspected 143,375 cars of wheat, 5,043 cars of corn, 7,565 of oats, 2,076 of rye, 8,712 of barley and 28,290 of flaxseed, a total of 165,065 cars. There was also out-inspection of 52,074 cars of wheat, and 33,843,702 bushels into vessels; 8,435 cars of coarse grains and 4,896,671 bushels into vessels; and 6,088 cars of flaxseed, as well as 13,441,671 bushels into vessels.

Of the 143,375 cars of wheat received during the year, 53 cars contained northern white wheat, 516 cars were red winter wheat, 21 cars white winter wheat, 2,909 cars winter wheat, 19 cars western white and red wheat, while 139,857 cars were northern spring wheat.

For the purpose of comparison the number of cars inspected "on arrival" in 1898, the big year, 1900 and 1901, or the year just closed, are tabulated as follows:

	1898.	1900.	1901.
Wheat .....	217,924	124,002	143,375
Corn .....	21,519	19,393	5,043
Oats .....	13,951	12,001	7,569
Rye .....	3,908	2,437	2,076
Barley .....	6,727	9,977	8,712
Flax .....	15,083	21,822	28,290

Total cars ..... 279,112 188,632 195,065

The revenues of the department for the year were derived from the following sources:

Inspection department .....	\$144,306.28
Weighing department .....	111,385.27
Country elevator licenses .....	1,549.00
Board of appraisers and samples sold...	287.39
Old accounts collected .....	90.00

Total ..... \$267,617.94  
Increase over last year..... 41,004.16

The disbursements for the year, including the board of appraisers, were \$232,237.62, a gain over last year of \$25,380.32. The surplus carried forward from last year was \$25,708.66, making the balance to the credit of the department, \$51,088.98.

Of the 261,642 cars of all kinds of grain inspected in and out, 34,220 were held out for reinspection. Of the cars held out, the original grade and dockage was confirmed in 20,654 cases; grades were raised in 9,664 cases; lowered in 1,641, and in 2,261 cases the dockage was changed. Appeals to the Board of Grain Appeals were made in 10,817 cases, and in 7,582 cases the decisions of the chief deputies were confirmed and in 3,235 cases changed.

On the subject of dockage the chief inspector reports that on the 139,857 cars of spring wheat



inspected, 26,871 cars were docked  $\frac{1}{2}$  pound per bushel; 62,794 were docked 1 pound to the bushel; 26,453,  $1\frac{1}{2}$  pounds; 13,184, 2 pounds; 3,441,  $2\frac{1}{2}$  pounds; 2,960, 3 pounds; 3,540 cars were docked over 3 pounds to the bushel, or an average of 4 pounds; and 614 cars were not docked. The net average dockage was 19.8 ounces to the bushel, against 23.5 ounces the year before.

The report states that the new system of daily reports, which was put into effect Jan. 1, 1902, has proved highly satisfactory.

From Jan. 1 to Nov. 1 of 1901 there have been inspected 192,401 cars, of which 24,818 were re-inspected. The grade of 9,776 was changed, and in 15,042 cars the original grade was sustained. There were 9,217 cars appealed and of those 2,730 were changed on appeal and 6,845 were sustained as originally graded. There were 180,282 correct inspections, or 93.7 per cent.

### WISCONSIN INSPECTION AT WEST SUPERIOR.

Grain dealers at Superior, Wis., have inaugurated a movement to establish Wisconsin state inspection at Superior and West Superior in place of the Minnesota inspection now in operation there; and an appeal will be made to the legislature to enact suitable laws to force the change. It is hinted that Gov. La Follette has interested himself in this movement.

So far as appears on the surface the Duluth interests are making no fight to prevent the change.

Some years ago a similar movement was begun but it amounted to nothing. For all of the elevator companies shut down their Superior houses for a period of about two months, and the loss to them is estimated to have been not less than \$50,000 for the sixty days. Superior then abandoned the idea of driving out Minnesota inspection and the matter was ignored until it was again revived a short time ago by the "Hundred Thousand Club" of Superior.

### TEXAS RATES.

The Texas Railroad Commission on November 20 issued an order making emergency rates, effective November 26, not exceeding in common point territory  $12\frac{1}{2}$ c per 100 pounds on shipments over a single line of railroad, or over two lines of railroad under the same management, and 15 cents per 100 pounds on shipments over two or more lines not under the same management. This is a cut of 5 cents per 100 pounds from previous rates. On single line roads 5 cents per 100 pounds will be added on milling in transit shipments. On grain reaching mills over two or more lines  $2\frac{1}{2}$  cents shall be added to the 15-cent rate.

These rates were made at the urgency of the Texas millers, who at a hearing by the Commissioner at Austin on November 18, complained that rates on Kansas flour and bran into Texas were as low as those on wheat from the same territory; and that, therefore, Texas millers, being compelled by a short crop to buy wheat outside the state, could not compete with the outside millers.

Sec'y Dorsey of the Texas Grain Dealers' Association, objected to a change of rate on bran, which is needed for feed in Texas, local millers being unable to supply the demand.

There was also complaint by Texas millers of the effect of the Texarkana gateway on their business; and at the hearing referred to J. T. Stark, a grain dealer of Plano and Texarkana, said any advance out of Texarkana would hurt his business; that he had been forced to establish a branch house at Texarkana, not for lower rates, because the through rates and combination of locals are the same except possibly on bran, but to meet the demands of his customers for quick deliveries. He said his firm saw the opportunity to give quick service out of Texarkana and grasped it, and he thought they ought not to be driven out of business to subserve the interests of one class and raise the cost to the consumer, the people.

Frank Kell, a miller at Wichita Falls, in reply

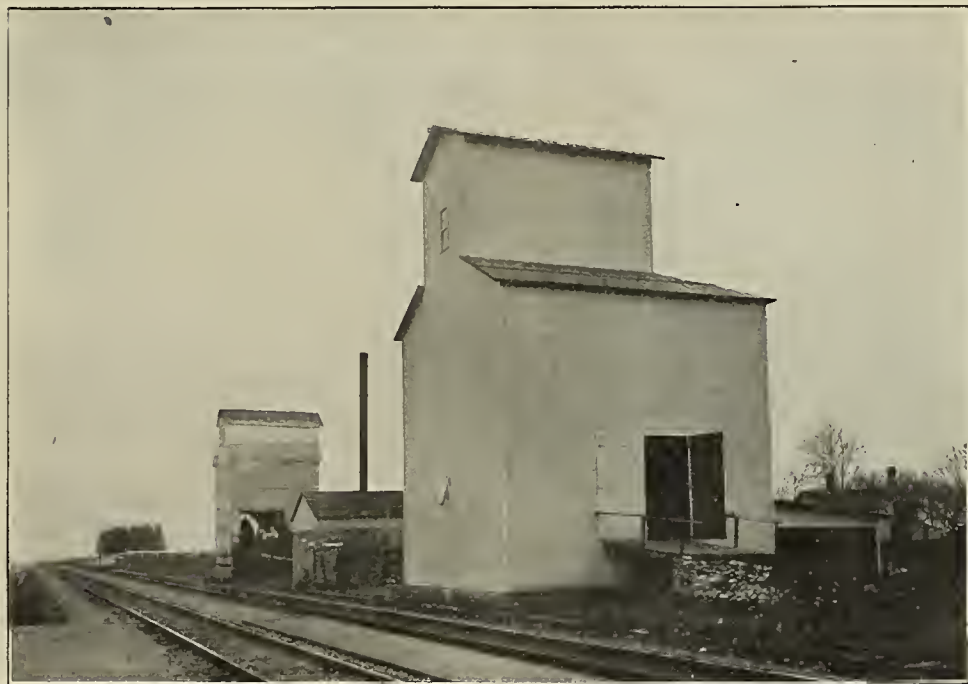
said the millers did not ask any advance in the grain rate out of Texas. It appeared further that dealers at Texarkana can take advantage of a 24,000-lb. minimum on grain and products not enjoyed by any other Texas point.

The emergency rate above is the Commissioner's solution of a problem which has troubled the milling trade for some months.

A few days later (November 29) the railroads of the Southwest, at a meeting held at St. Louis, decided to restore rates on grain and grain products from interstate to Texas points from the proportioned to the old through basis, effective December 15. This means an approximate advance of 4 cents per hundred pounds.

### RISSEY HOUSES AT TUCKER, ILL.

The two elevators shown in the accompanying engraving have been erected to replace the elevators of R. G. Rissey (Kankakee) at Tucker, Ill., which were burned in June last. Mr. Rissey is an old buyer, and knows what the country station needs in the way of a house and its equipment; and he says of these two houses: "I am satisfied I have as



R. G. RISSEY'S NEW ELEVATORS AT TUCKER, ILLINOIS.

convenient and as good a plant as can be found in the corn and oats country."

The north house, used for oats only, is 40 feet square and 44 feet high, giving a capacity of about 52,000 bushels. The south house is 28x32 feet in size and 36 feet high. It is used for corn only, of which it will hold about 20,000 bushels.

Half way between the two elevators is a stone engine house, containing a 40-horsepower engine and boiler, while back of the engine house are the office and scales.

### AN "OPEN BOARD" AT MINNEAPOLIS.

A new corporation, called the Minneapolis Grain and Stock Exchange, on November 24, filed incorporation papers preliminary to beginning business. The officers named are Geo. K. Shaw, president; H. S. Zoller, vice-president; Erving J. Kneen, secretary, and Albert Dollenmayer, treasurer, with J. E. Osborn, F. D. Woodbury, E. J. Davenport, P. W. McAllester and P. E. Cooper, directors.

The president, Mr. Shaw, was formerly a financial writer on the Minneapolis Tribune and other Twin-City papers, and will edit the daily market sheet to be published by the new exchange. Sec'y Kneen is a member of the Minneapolis Produce Exchange. The directory includes an oil promoter, an ex-bank examiner, an attorney, a civil engineer and a mining company promoter. The membership will be limited to 500; with dues not exceeding \$100 a year each, and a total authorized debt limit of \$25,000.

Rooms have been taken on the ground floor of the

New York Life Building. The pits for trading in wheat, local stocks and oil and mining shares are now ready for speculators.

### A NEW PLUNGER.

The latest recruit to the sensational plungers on the western grain exchange is Thos. A. Cleage of St. Louis, who has been manipulating corn at St. Louis during the past month or so.

Mr. Cleage is not a member of any exchange and is running a blind pool game in corn through the regular brokers, and is said to have been very successful so far and to have paid members of his pool big dividends.

Mr. Cleage has, it is claimed, two schemes, a daily and a ninety-day, and those who go into the latter are required to stay in until it works out. The December operations have been very heavy.

Although Mr. Cleage has been operating in St. Louis for several years, says a St. Louis paper, he is a new figure in the ranks of the plungers. He is 43 years old and comes of a family well known in the South. His father was Thomas E. Cleage of Athens, Tenn., the central figure in a

clever Civil War story. At the beginning of the war Mr. Cleage, Sr., was president of the only bank in Athens, in which was deposited several hundred thousands of dollars in United States currency. To prevent the confiscation of this money by the Federal government Mr. Cleage fled with the funds. When peace was declared he returned to Athens and paid his depositors in full, with the addition of the interest which had accrued on the money which they had placed in his keeping. The son is a graduate of the University of Tennessee, of which his grandfather was president. He was formerly in the cotton business.

### WASHINGTON GRAIN.

State Grain Inspector Arrasmith of Washington made his biennial report to the governor on November 28. He says the number of carloads of wheat inspected at Seattle, Tacoma and Spokane for the two-year period ended August 31, 1902, was 38,540, or 35,268,540 bushels; of oats, 2,265 carloads, or 3,125,700 bushels; barley, 1,432 carloads, or 1,346,280 bushels; rye, twenty-eight carloads, or 33,100 bushels; a total number of cars of grain, 41,266, or 39,763,620 bushels.

The increase of the amount of grain inspected or received was 48 per cent over the two-year period ended August 31, 1900, as against only a 3 per cent gain for the 1900 period over the period ending in 1898.

The earnings for the period just ended were \$18,260.70, and the expenses \$14,301.05, leaving a balance of \$7,405.06.



### SHUT UP BY THE RAILROAD COMMISSIONERS.

A press telegram from Belleville, Ill., dated December 3, says:

"The 'Southern' and 'Belt' elevators at East St. Louis, owned by George McReynolds and P. P. Williams, respectively, the two largest grain elevators in Southern Illinois, were practically closed to-day by an order of the Illinois Railroad and Warehouse Commission, thereby tying up over 4,000,000 bushels of grain.

"The trouble arises over the refusal of the management of the elevators to allow the Illinois state weighers to weigh the grain therein. The state Railroad and Warehouse Commission ten days ago gave notice to the owners of the elevators that they must comply with the state law, which gives the Commission supervision and exclusive control of all weighing of grain at all elevators under state inspection.

"On Monday Chief Weighmaster Bradley sent two weighers to take the place of the two on duty at the elevators. They were refused admission. The situation was then reported to Hon. J. E. Nevill, chairman of the Commission, by long-distance telephone, who gave orders that, as long as the elevator people refused to allow the weighmen of the state to officiate, there should be no inspection of grain out of the elevators."

### BUCKET-SHOPS HIT.

On December 4 Judge Humphrey of the U. S. Circuit Court at Springfield issued an injunction enjoining forty bucket-shop keepers in the southern district of Illinois from "obtaining, receiving, selling or distributing the market quotations of the Board of Trade of the city of Chicago, and from aiding, abetting or assisting others in the taking or distributing said quotations, and the defendants are ordered to plead or answer herein by January 1, 1903."

The first defendant named on the list, R. V. Cleage of Springfield, is a brother of Thos. Cleage of St. Louis, who has been conducting a "blind pool" in December corn with large operations in

George T. Ray, Rossville; Eugene Adler and A. H. Curtis, Champaign.

Nearly a dozen are correspondents of the Central Stock Exchange, formerly of Chicago, which has been sending out the quotations from Hammond, Ind., since it was enjoined from using them in Illinois.

### THE "MUIR IMPROVED" STEEL PLATE FRICTION CLUTCH.

The accompanying cuts show the "Muir Improved" Steel Plate Friction Clutch Pulley as manufactured by the Skillin & Richards Mfg. Co. of Chicago.

The "Muir Improved" embodies all the important

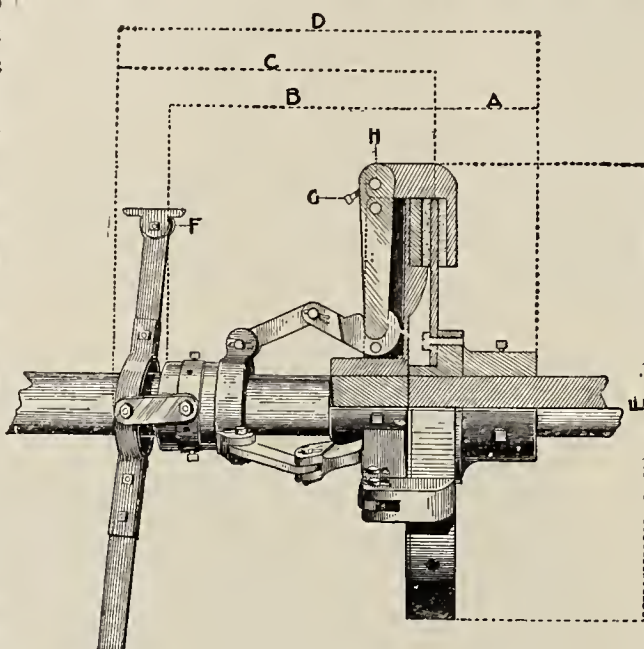
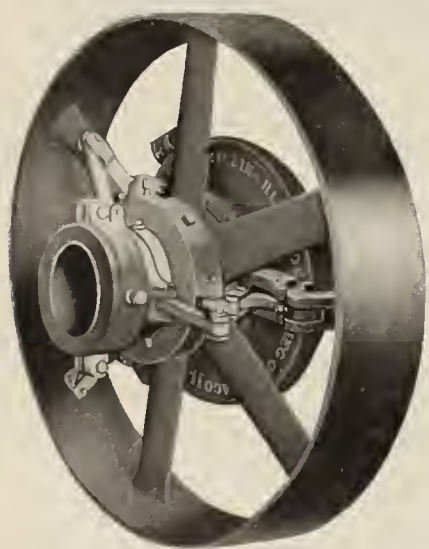


DIAGRAM OF "MUIR IMPROVED" FRICTION CLUTCH.

features of the well-known steel plate friction and possesses several other advantages as well. In the old style steel plate clutch the mechanism is connected to and revolves with the shaft, making it necessary to shut off the power in order to adjust it. When the "Muir Improved" is used as a driving pulley the mechanism stands still when thrown out of gear and it can be adjusted while the shaft is running. The steel plate is bolted onto a hub which



THE "MUIR IMPROVED" STEEL PLATE FRICTION CLUTCH.

the St. Louis, Chicago and Kansas City markets. The other defendants are A. E. Babcock, J. Lochridge, Chas. O. Jones and Wm. R. Lochridge, Springfield; Charles W. Shade and Roy Maddocks, Lexington; James F. Cooley and Colby Harry Knapp, Lincoln; Samuel L. Weaver, John L. Keistern, Peter Chase, Benjamin Z. Taylor, John L. Schroll, Frank Dorwin, James K. Stafford, Earl Russell and Samuel Durbin, Decatur; C. H. Marshall, Rossville; Ezra E. Staninger, H. A. Munday and Andrew J. Munday, Hoopeston; John Richards and Louis McMillan, Cerro Gordo; McBride, Bemeut; William D. Mathers, Virginia; Oscar Weisenberg, Jacksonville; J. A. Joel, East St. Louis; Robert A. Groch and William C. Applegate, Danville; R. J. Hammond, Pana; Xerxes Wallace, C. F. South and H. S. Beem, Shelbyville; P. B. Howstrawser, Olney; Thomas A. Gasaway, Charleston; James Moxam, Milford;

is keyed to the shaft, and as the plate is partially covered by the hood, the hub is the only running part visible.

This clutch occupies less space on the shaft and a given size can be used on shafts of much larger diameter than the old style steel plate clutch.

The outer diameter of the steel plate is shod with heavy Davy Friction Paper secured by means of hardwood pins. As power is obtained by pressure against the sides of the plate instead of the periphery there is no tendency to pull the friction surfaces apart under high speed.

The Skillin & Richards Mfg. Co. are large makers of friction clutches and they make and carry in stock a large number of sizes of the "Muir Improved," ranging in capacity from 4 to 250 horsepower. They will send descriptive circulars and price lists on request.

### DRY IOWA CORN.

The agricultural authorities of Iowa incline to the opinion that nothing is seriously the matter with Iowa corn (out of condition corn) except that it needs drying. Such, at least, is the opinion of Prof. J. B. Weems, state chemist, located at the College at Ames, who in a recent letter to a representative of the Chicago Great Western Ry. said:

"We have made a number of the analyses of the corn crop of this year; and from the results which have been obtained, it appears to me that the problem is one in which a certain amount of water must be allowed to dry out of the corn crop in order to insure its keeping. The amount of water present in corn varies from 29.83 to 35.24 per cent. This is quite a large amount when we compare it with the amount of water in the crop last year, which varies from 11.16 to 1.57 per cent, or the average contents for ordinary corn of about 15 per cent.

"The amount of protein, fat, crude fibre, ash, starch and sugar present in the corn is practically the same in the new corn and the old, when compared with one another in a dry condition. The corn cobs also contain an excessive amount of moisture, and vary between 49.63 and 57.29 per cent, as compared with 15 per cent in the cobs grown last year. The idea which is brought forward by some that the nutriment is stored in the cobs is not true, but the chemical composition of the cobs, when compared on a dry basis, is practically the same for the old and those grown the present year.

"The entire problem, it seems to me, is limited to the best manner of drying the corn in order that from 15 to 20 per cent of moisture may be removed from the corn. Whether it will be best to allow this drying process to be carried out under ordinary atmospheric conditions, such as allowing the corn to remain in the field in the shock, or whether some artificial means of drying must be adopted, is a problem for each community to settle for itself. It appears to me, however, that under careful hands corn can be cured without any great risk of molding.

"Personally, I sincerely hope that as the result of favorable weather this excessive amount of moisture will be driven or taken away from the corn by the atmosphere itself, and if carefully watched and cared for no unfortunate results will be obtained."

### CHICAGO TEAM TRACK WEIGHTS.

At a meeting of the Illinois Valley Grain Dealers' Association, held at La Salle, on November 25, the following resolutions were unanimously adopted:

Whereas: The weighing of grain in Chicago on railroad team tracks scales is exceedingly unsatisfactory and unreliable; and,

Whereas: The losses arising from the same are very important both to the country shippers and to the railroads; and,

Whereas: The weights furnished by the Chicago Board of Trade Weighing Department are correct and entirely satisfactory to the trade; be it, therefore,

Resolved, That the Illinois Valley Grain Dealers' Association respectfully requests the western railroads delivering grain at Chicago to have all grain which is sold to be unloaded from Team Track weighed under the supervision of the Chicago Board of Trade Weighing Department; and also respectfully requests that the directors of the Chicago Board of Trade confer with the railroads interested and make every possible effort to correct the evils now attending the handling of grain delivered from team track. Be it further

Resolved, That copies of this resolution be sent to the various grain dealers' associations and organizations in territory tributary to Chicago, urging them to co-operate with us in giving this matter effective support.

The same resolution was adopted on December 9 at a meeting of the Central Illinois Association held at Peoria.

The inspection committee at New York in two recent instances made wheat contract after the chief inspector there had rejected it. There is a growing impression among those who keep track of affairs that the New York contract grade is being lowered this season.



**J. C. DIFFENDERFER.**

J. C. Diffenderfer, president and treasurer of the Lincoln Grain Company, which has succeeded to the business of the late Paul Smith of Lincoln, Ill., is a man of much experience in the grain business, both at the country station and on the Chicago Board of Trade floor. Born and educated in central Pennsylvania, on reaching his majority he became interested with his father in the lumber and manufacturing business at Lewisburg, in which he spent a number of years. In 1871, however, somewhat "badly bent," though not broken financially, he yielded to the western fever, and reached Chicago in July.

A few months later he drifted out into the country, reaching the interesting village then known as Squaw Grove, since selected to perpetuate the name of a once well known railroad builder, as Hinckley. Here he met and was employed by J. M. Voorhees, then grain buyer for Riggle & Co. of Chicago. Later on, he represented the same firm at Waterman, Ill., as buyer.

When one of the historic oat corners of the time drove this firm to the wall, Mr. Diffenderfer returned for a brief period to Lewisburg where he resumed his old place; but it is difficult to get



J. C. DIFFENDERFER, LINCOLN, ILLS.

the ozone of the West out of a man's blood, once it is in it; and we find him after three years of this nostalgia, back in Chicago again, with J. M. Voorhees, looking after the inspection and sampling of grain.

Six months later he became connected with Geo. H. Sidwell & Co., Chicago, in operating a country elevator on joint account. After two years of this work he returned to Chicago to represent that firm on the Board of Trade, remaining in the office until 1886. This connection was then interrupted by two years' experience in flour and feed at Philadelphia; but he came back and resumed his old position which he held until 1898, when he went to work for the Washburn & Moen Manufacturing Company at the Lake street office.

When this company was absorbed by the American Steel and Wire Company Mr. Diffenderfer went along as part of the "assets." March, 1901, found him, however, with the Shelby Steel Tube Company at the Chicago office, where he remained until the absorption of that company by the United States Steel Corporation turned him loose by the abandonment of the office and its removal to Pittsburgh.

The role of man of leisure never having been a congenial one, he turned his attention, naturally enough, to grain; whereupon he organized the Lincoln Grain Company, with capital stock of \$25,000, of which he holds \$24,800, and purchased the elevators and good will of the business of the

late Paul Smith at Lincoln, Ill. During the past summer he has built a new elevator at Lawndale, which is one of the most complete on the Chicago & Alton's "Only Way" and remodeled those at Broadwell and Lincoln. In these three houses he has placed as local buyers B. F. Kellogg (Lincoln), Isaac Eisinger (Broadwell) and John Hillrichs (Lawndale), all employees of the late Mr. Smith; while Mr. Diffenderfer will himself make his home and general headquarters at Lincoln. His family consists of a wife and son, who are, of course, "onlys"; and as soon as stuff begins to move nicely, the Mr. D. expects to be the busiest man in Logan county.

**TRADERS DISCIPLINED.**

The Chicago Board of Trade directory on November 18 surprised the street by suspending W. H. Bartlett and F. P. Frazier, president and vice-president respectively of the Calumet Elevator Company and members of the firm of Bartlett, Frazier & Co., on a charge of violating the Board's rule prohibiting the shipment of contract grades of grain by elevator managers. The rule in question (R. 21, Sec. 11), which was adopted in 1894 to prevent elevator owners or managers from dealing in grain on their own account in public elevators, as the law provides, is as follows:

The proprietors or managers of regular warehouses shall be required to sell their regular contract grades of grain or flaxseed in the Chicago market only, and shall not ship any grain from any regular warehouse of which they are proprietors or managers, except those grades which are denominated and understood to be "off grades;" provided, however, that the board of directors of the Board of Trade may, upon application, grant to such elevator proprietors or managers the privilege of shipping such quantity of grain from their elevators as will sufficiently relieve such elevators from being overloaded, or as will maintain the condition of such grain; and furthermore, the proprietors or managers of such warehouse shall be prohibited from buying grain at any noncompeting points.

The complaint was made by Director H. B. Slaughter, and Mr. Bartlett, defending in person, said: "I have violated no rule of the Board, and believe in maintaining them. We have done the same as all the elevator people. The Calumet Elevator Company, which operates the elevators, is a distinct firm from Bartlett, Frazier & Co. It is composed of W. H. Bartlett and F. P. Frazier. The other members of the firm of Bartlett, Frazier & Co. have nothing to do with the elevator business. The shipping was done by Bartlett, Frazier & Co. and not by the elevator company." To this a public statement was added in which it was said: "The elevator owners believed that where the elevators were managed by a corporation entirely distinct from the grain firm then the requirements of the rule had been met. Up to this time this interpretation has received the tacit approval of the directory, as they have year after year made the elevators regular under these conditions, and this action comes as a surprise to all elevator interests."

The directors voted that the elevator receipts would not be affected. They also said that it would not affect the firm of Bartlett, Frazier & Co.'s standing in the clearing-house, the proceedings being against the individual members of the elevator company.

During the ten-day period the firm of Bartlett, Frazier & Co. was succeeded by H. H. Peters, so far as the business of the firm in Chicago was concerned, the firm clearing through the Carrington-Patten Company.

In this connection and in answer to numerous enquiries, the Board of Trade committee named has issued a circular explanatory of the recent decision of the Illinois Supreme Court on the warehouse law and the Board's position. The directors have approved of the circular, which is as follows:

"The warehouse committee calls special attention to the following extract from the decision of the Supreme court of Illinois in the case of Hanna vs. The People:

"No question is presented by this record as to the right of a public warehouseman to store his own grain in vacant places in his own warehouse where the space so vacant was not occupied and not needed for the storage of grain of customers of the ware-

house. That which the warehouseman here seeks to do and which the court has prohibited from being done is the mixing of grain of the keeper of a public warehouse with that of his customers and issuing and dealing in certificates of warehouse receipts representing a mass of grain composed of that of the keeper of the warehouse and of his customers."

"The committee also directs attention to the following, taken from the warehouse law of Illinois:

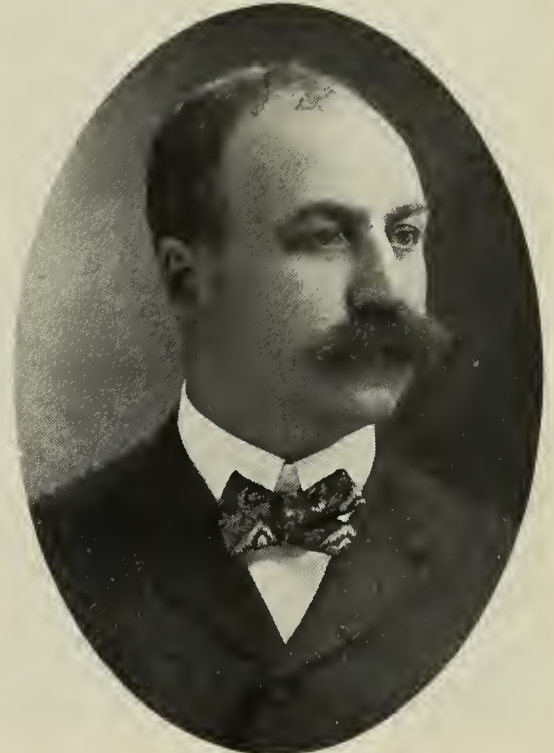
"Grain of the same grade may be kept in a bin by itself, apart from that of other owners, which bin shall thereupon be marked and known as a 'separate bin.' If a warehouse receipt be issued for grain so kept separate, it shall state on its face that it is in a separate bin, and shall state the number of such bin."

"The words 'special bin,' also the number of such special bin, must, in all cases, be plainly and conspicuously marked upon warehouse receipts for grain stored in a separate, or special, bin."

"Section 1 of rule 21 of the rules of the Board of Trade of the City of Chicago provides for the delivery of regular warehouse receipts on contracts. Receipts issued upon property in a special bin would not be deliverable under that clause."

**C. C. BUCK.**

Among the country grain dealers of Iowa few have been more successful than C. C. Buck of Hubbard; and what is the more gratifying to his friends, all his wealth has been accumulated by strictly legitimate methods. He has never speculated; his relations with the farmers have always been those of an upright man; his money is clean



C. C. BUCK, TOLEDO, IOWA.

and his reputation as bright as his own conscience is easy.

Born in Vermont in 1858, he was brought by his parents to Iowa in 1868, the family settling at State Center, Marshall County. Here he obtained a common school education, which as a young man he supplemented by a business college course. His first occupation was farming, after following which on his own account for three years he abandoned it to go into the grain business at State Center. This was twenty years ago. For eighteen years he handled agricultural implements at State Center in connection with his grain business; and at the end, although he had started in a small way, his "plan of campaign," to make a business that should be founded on honor being the larger part of his capital, when two years ago he sold his State Center business he had the satisfaction of delivering to the purchaser one of the best and most substantial business enterprises in Central Iowa and of having a respectable fortune besides invested in Iowa, Minnesota and Dakota farms.

From State Center he went to Toledo, making that place his home and headquarters for a grain business which included an elevator at Garwin, at both of which places he handled the bulk of the grain marketed.

Some four months ago he decided to take a breathing spell, and accordingly he sold out his two elevators, and having closed his home, he spent some time with his family touring the Rocky Moun-



tains. During this time he received several very flattering propositions to go into business again, but promptly rejected all of them, preferring to be free in every way until his play time should be over; knowing that when his old-time habits should reassert themselves he would have no difficulty in finding something to his liking. Now that the busy season is on again, therefore, we find he has bought the grain and lumber business of C. L. Kenney at Hubbard, Iowa, some distance west and north of Toledo, on the C. & N.-W. Ry., where without doubt he will continue his former successes.

#### C. A. MAY.

The secretary of a grain dealers' association has a peculiarly difficult position to fill; and the office, therefore, calls for a man who both has a thorough knowledge of the technicalities of the grain trade and is also equipped, not merely with a knowledge of human nature, but with the ability to meet and to manage men—who has the finesse of the diplomat and the fairness of a judge, with not a little of the latter's firmness and judicial character.

C. A. May, who, in October last, succeeded E. A. Burrage as secretary of the South Minnesota and



C. A. MAY, MINNEAPOLIS.

South Dakota Grain Dealers' Association, seems to be that type of a man; and certainly his prior career marks him as a man likely to be more successful as the executive officer of a grain dealers' association.

His connection with the grain trade commenced in 1887, when he began a connection with the Minnesota and Dakota Elevator Company, for whom for six years he acted as agent at Dassel, Minn. While still agent for the company named he was elected sheriff of Meeker County, Minnesota, to which office he was subsequently twice reelected, thus serving that county for six years in its chief executive office.

On retiring from office he entered the grain commission business at Minneapolis, being connected with the Graves-May Company. He was still a member of that company when in October, 1902, he accepted the position of secretary-treasurer of the South Minnesota and South Dakota Grain Dealers' Association. Mr. May's office is 225 Godfrey Block, Minneapolis.

The Chicago deputy weighmasters organized a union at the Board of Trade building on November 29, and have applied for a charter to President Daniel J. Keefe of the International Longshoremen, Marine and Transport Workers' Association. The charter members are Charles McArthur, Guy Olds, William Warnock, H. L. Gilfridge, G. W. Jeffries, H. V. Welty, C. Heegwene, J. W. Winchester, C. C. Hunter and William Pilgrim.

#### MIAMI VALLEY DEALERS.

A meeting of about eighty-five dealers composing the Miami Valley Grain Dealers' Association met at Springfield, O., on November 12, for general purposes.

Secretary McCord of the state association was present, and made a report of the transportation situation in connection with the handling of the corn crop.

There were some changes of officers, M. W. Miller of Piqua succeeding H. M. Allen of Troy as secretary, while E. A. Brecount of Fletcher was elected treasurer.

#### MILWAUKEE NEEDS ELEVATOR.

The rule adopted some weeks ago raising the grades of contract grain to a parity with those at Chicago has been beneficial to business in the Cream City. The commission men are pleased with the improvement, and Chamber of Commerce memberships are said to be worth \$100 at least more than they were valued at two weeks ago.

The business is largely of the wind kind, however; privileges, that is to say, in plain English, based largely on Chicago documents. Milwaukee herself, though a large milling center, etc., is conspicuously wanting in modern elevators of the fire-proof type. Insurance at current rates is too expensive a luxury to encourage grain storage in that city, and grain men would extend the very glad hand to any one who would put up a genuine fire proof storage elevator there.

#### SHRINKAGE OF EAR CORN.

The results of tests of the shrinkage of ear corn, from the time it is husked until it is delivered, as made by both farmers and experiment stations, are more or less conflicting, says the Orange Judd Farmer. At the Michigan Experiment Station in 1896 corn was husked October 3 to 5. By the middle of February the shrinkage amounted to 30 per cent. This was, of course, an extreme case. In another test at the same station corn was husked October 21 and shrank 11 per cent by January 31, while well cured corn in Van Buren County, Mich., shrank only 3 per cent from the time of husking until January 7.

At the Iowa Experiment Station corn was placed in a crib set on scales and the decrease noted from month to month. This test has been in progress three years. The first year the shrinkage was 20 per cent, the second year a shrinkage of only 9 per cent was noted and the third year 15.8 per cent. The average is about 15 per cent.

At the Illinois Experiment Station 1,000 bushels of corn lost 11.5 per cent from the time it was cut until it was thoroughly air dried. This is the result of a three years' test.

A Tippecanoe County, O., farmer placed 19,701 pounds white corn in a crib December 15, 1894. By August 16 the following year it lost 15.5 per cent.

In Christian County, Ill., Messrs. Ricks, Provine and Maxon placed 16,155 bushels of corn in an ordinary covered crib during the autumn of 1895. The corn was sold the following July, the shrinkage amounting to 7.75 per cent. The corn was in fair cribbing condition when husked, but the winter and spring following were unusually dry. In the fall of 1897, 7,106 bushels were cribbed and sold on July 25, 1900, and the shrinkage was 350 bushels, or slightly over 4 per cent. In 1900, 12,228 bushels were cribbed and the shrinkage by the next fall amounted to 453 bushels, or slightly over 3.7 per cent. Mr. Maxon states that the corn in 1899 was very poor, in fact, the poorest ever raised on that tract, but in 1900 the crop was of excellent quality, although the ears were not large. He believes that his neighbors consider his corn shrinkage very small. This may be due to his manner of cribbing it and to the quality of the corn. He has a double crib 250 feet long and holding 20,000 bushels. The corn is kept quite dry.

In 1881 Dr. Manley Miles made some tests in Michigan and found that from husking time until

the succeeding spring the shrinkage amounted to a little over 15 per cent.

In Kentucky a number of farmers pay particular attention to shrinkage and they find it ranges from 7 to 18 per cent.

A number of tests have also been made by experiment stations to determine the amount of shrinkage after the corn has been shelled. In most of the tests shelled corn shrank 7½ per cent during five months.

#### C. N. ADLARD.

C. N. Adlard is one of the few men who have been able to eschew the fascination of practical milling and to become content only with handling the grain itself. Born at Canal Dover, O., in 1860, he spent a number of years with his parents on a farm near Limaville, Stark County, until he reached the age of fifteen, when he became an apprentice in the mill of Heath Brothers at Shelby, with whom he learned his trade.

From Shelby he went to Cleveland, O., where at the age of 23 he had charge of the old National Mills. Two years later he gave up this position to go into the milling business with his brother, W. H. Adlard, at Milford Center, O., which business



C. N. ADLARD, PIQUA, OHIO.

a few years later he relinquished to give his entire time to the grain trade.

He is now located at Piqua, Ohio, where he has one of the most complete modern houses in Ohio, from which as head office he directs operations at his two other houses at Houston and at Russia, respectively; in all of which places he is doing a large and profitable business.

Mr. Adlard is assisted in his business by his wife, who was Miss Ella F. Craig of Cleveland. She has taken charge of all his office work, with the details of which she is familiar.

#### CANADIAN EXPORT GRADES.

The Trunk Line Association has limited the number of Canadian grades of grain exported through New York to eighteen. Hitherto the number was twenty, and Canadian shippers were about to ask for an increase to twenty-four. With twenty grades allowed special bin room, the Manitoba grains had eight grades and the Ontario and Quebec grains twelve. Naturally the original notice of a reduction to fifteen grades, or 25 per cent of the former number, raised a protest; and the result was a compromise at eighteen. This arrangement gives twelve bins to Ontario and Quebec and only six to Manitoba.

A permanent injunction in favor of Bartlett, Frazier & Co. has been issued at Joliet restraining the Will County board of tax review from assessing grain in the Midland Elevator at that point.



## FORD AND METCALF.

The elevator of Ford & Metcalf at Illiopolis, Ill., a "Wabash" house, apparently covers a good deal of ground, but it is thoroughly equipped for doing business and is a very satisfactory house in spite of its appearance of "spread." The main building is 26x104 feet with an addition for bins 16x56 feet in size. The height is sufficient to give a total storage capacity of 50,000 bushels.

There is also an engine and cob house 36x48 feet in size; the engine room containing a 25-horsepower engine with boiler to suit.

The machinery on the premises consists of a Western Corn Sheller and Cleaner and 15-ton Fairbanks Hopper Scale, erected at a sufficient height to permit grain to be spouted directly to the cars.

This house is but one of three operated by Ford & Metcalf, the others being located at Lanesville and Buffalo, also on the Wabash. The Lanesville elevator is equally as good as the one just mentioned. At Buffalo, however, they have a dump crib only, but it has 20,000 bushels' capacity. The stations are all connected by wire with the main office at Illiopolis.

The firm has done a good business all the past year, in spite of the light crop going to market; and they hope to do still better on the crop now being picked.

## CROP REPORT ENQUIRY.

The special committee appointed by the various commercial exchanges of the country to act in conjunction with the standing committee on crop reports of the National Board of Trade, for the purpose of investigating the discrepancies between the reports of the Census Bureau and the Agricultural Department on the crop of 1889, and their methods of collecting and compiling such statistics, has made its report, which was published on November 21.

## CENSUS BUREAU METHODS.

The committee, which for several reasons was finally reduced to Wm. S. Harvey of the Philadelphia Commercial Museum, J. C. Brown of the New York Produce Exchange, B. Frank Howard of the Chicago Board of Trade, H. A. Wroth of the Baltimore Chamber of Commerce, and Chas. B. Murray of the Cincinnati Chamber of Commerce, first devoted nine days to investigating the work of the Census Bureau, the methods of collecting and compiling statistics, which they found of such a character as to give no assurance of accuracy. Not to mention the character of the work of collecting the statistics, the committee says of the work of tabulating the returns, that—

The punching operators were women. When a new clerk was assigned to this work she was placed on experimental work for some length of time, to become familiar with the symbols and the machine. The work was then occasionally examined and verified by the chief of the section, but no record of errors was kept. As soon as in his opinion the stage of proficiency had been reached to justify it the operator was assigned to regular work, as a substitute, taking the place of one who happened to be absent on leave. This was regular work, and every card of such operator was verified until the percentage of error was reduced to one-half of 1 per cent, which means that there was on an average not more than one error to each 200 cards. When this point of proficiency was reached the clerk was given a permanent place whenever a vacancy occurred, and after that only about one-fifth of the daily work was examined, provided the error record for the month did not exceed one-half of 1 per cent.

As a result the committee found numerous errors; that, in fact, the ratio of errors found in the tests of card punching was 1.34 per cent, which, applied to the 120,000,000 cards containing these returns, would give 1,608,000 as the whole number of errors.

Speaking on the matter of farm area, which in the Census Report was greatly in excess of that indicated by the Agricultural Department, the committee say—

"Features of inconsistency in the census bureau work are to be found in comparison of area, in instances where the agricultural returns make the farm areas equal to or exceed the land surface, according to survey records as presented by the twelfth census. There appear many such instances. In twenty states, in which there are 1,490 counties, there are 101 counties made to appear as having farm lands equal to or in excess of the entire surveyed land surface. This number includes a few

which by a small fraction of 1 per cent are under 100 in the comparison, but which practically represent the entire land surface. The excesses over an equal extent of area range up to 40 per cent, the aggregate number of acres indicated in the farm returns for these 101 counties being 5 per cent greater than their entire surface, without allowances for highways, towns, railroads, etc. Of the 101 counties there are 69 which appear to have more farm acres than the surveyed land records indicate within their boundary lines; there are 23 having over 5 per cent excess of such area; there are 13 having over 10 per cent of such excess; 10 having over 15 per cent of such excess; 8 having over 20 per cent of excess, in comparison with the reported actual land surface. For Ohio, 19 per cent of the number of counties are shown to represent 100 per cent or more of the entire surface as in farm lands; in Iowa, 17 per cent; Kansas, 12 per cent; Kentucky, 9 per cent; Missouri, 9 per cent; Tennessee, 6 per cent; Indiana, 6 per cent, etc."

In short, it would appear from the Census Bureau report that "over 28 per cent of all the 2,800 counties of the country represent farm areas reported as 90 per cent or more of the surveyed land surface," which is, of course, absurd. Where the blunder is to be found—in the original returns or in errors of tabulation—the committee say they are unable to determine.

As to improvement in the Bureau's methods, the committee recommend—

1. In all the more important districts the census supervisors should institute schools for instruction of enumerators, to the end that the fullest possible understanding shall be had of the requirements for correct records on the schedules, thus securing a higher degree of accuracy in the primary basis for such statistics.

2. In the editing of schedules greater care should be had in having the clerk well qualified by fitness and training for such work, for in this feature is



GRAIN ELEVATOR OF FORD &amp; METCALF, ILLIOPOLIS, ILL.

one of the most significant of possibilities for harmful shaping of the results, and therefore one of the greatest of needs for careful and intelligent scrutiny and preparation of this record as a basis for compiling and tabulating operations.

3. Verification of the cards prepared for the tabulating machines before instead of after machine tabulation.

4. The more important crop data should be tabulated in duplicate to prove the accuracy of the work.

## AGRICULTURAL DEPARTMENT METHODS.

The committee find that the Department obtains its crop information from three sources, to-wit: 2,500 county correspondents (who in turn have correspondents or assistants) reporting directly to the statistician, from 2,800 grain producing counties and 30,000 (approximately) township correspondents, who also report directly to the statistician. These two sets of returns are tabulated separately as checks upon each other. These correspondents serve without pay, except that they are furnished with seeds, bulbs and agricultural literature. Then there are thirty-eight state agents with salaries of \$300 to \$800 each, having correspondents reporting to them, who also report to the statistician general results for their states.

This gives three distinct sets of correspondents reporting independently of each other on the same subject matter; and in addition there is still another, or fourth, element, called "special field agents" (six in number, paid \$5 to \$7 per day and traveling expenses), whose province it is to make special enquiries whenever and wherever "unusual or abnormal conditions [are] found to have an existence."

The Department's method of reporting is as follows; and these details are worth remembering, as a clear understanding of the method pursued in making up the monthly reports may dispell some

of the misapprehension existing in the minds of some as to the reports' real meaning:

The Department reports of area from year to year are based upon percentage estimates, 100 representing the understood position of the preceding year. These estimates have had as a reconstructed, or starting, basis the latest census returns, from which the results have been calculated during the period between the dates of such information being available. It is understood, however, that modifications have been made from time to time in the light of evidence that such results have diverged in important degree from the true position. The early statements yearly of such crop areas as represent grain include comparisons recognizing 100 as the seeding of the preceding autumn and of the preceding spring, the final report as the harvested area being modified by any estimates of danger due to abandonment or loss of crops, etc. Thus the harvested area is presented as in comparison with the understood harvested area of the preceding year.

The reports on condition of crops in the growing and maturing period are based on the percentage system, 100 representing, as officially stated, "a condition of perfect healthfulness, unimpaired by drought, hail, insects or other injurious agency, and with such growth and development as may reasonably be looked for under these favorable conditions."

In the consideration of returns of condition and yield per acre, full recognition is given to the relative area basis by counties, in each particular, thus securing a true average.

The statistician makes a comparison between the results of the computations of his office from reports from townships and from county correspondents and from state and special field agents, and when any material differences appear he endeavors to reconcile them by examination, as far as practicable, into the reasons for such variations. If they are in close agreement, he accepts them as a basis for his estimate.

The committee regard the statistician, Mr. John Hyde, as "entitled to high commendation, especially

under evidences that the chief causes for defective results in his work have been in large part attributable to conditions inherited, and which in the nature of the organization of the office could not be at once remedied or were beyond his control." While, therefore, even were the basis theory of the reports unimpeachable, its defects must be attributable to various causes. In the first place, the starting point, the latest census report, may not be correct. Then there is the tendency on the part of correspondents to underestimate percentage comparisons, and the possible unfitness of the correspondents for the work. And here it appears that the age of the correspondents is against such personal fitness, the ages of sixty-nine persons thus engaged ranging from forty-eight to seventy-six years, with an average of forty-eight years for the sixty-nine. Otherwise the work, according to the committee is hampered by its retention as a division with inadequate funds at its disposal. But the committee do not unreservedly approve the percentage system, whose estimates, they say, "almost invariably have a tendency to under-statements."

## CONCLUSIONS ARRIVED AT.

Wherefore, as the result of its examination of the statistics division of the Department, the committee has reached the following conclusions:

1. The errors in crop statistics of the Department of Agriculture appear to have been due more to a faulty area basis than to any other cause.

2. The present statistician appears to have earnestly endeavored to secure correction of the errors in the area basis of crops, but as late as 1901 he had manifestly not fully overcome the deficiencies in this particular which existed when he entered upon the work of his office [August 1, 1897]. The stated proportions of a crop when based on percentage calculations are a misrepresentation to such extent as the area basis is erroneous.

3. In readjusting the area basis during the crop



rent year the statistician has accepted the Census Bureau returns, with some exceptions, wherein there was deemed ground for modification in the light of other evidence.

4. The statistical division is more or less embarrassed, and seemingly to an important degree, by the manner in which the working force of the office is organized under political influences, making it impracticable for the statistician to reconstruct the service on a basis of qualification and efficiency.

5. While the percentage system used by the Department of Agriculture cannot be depended upon for the fullest degree of accuracy of reported results, it is undoubtedly the best practicable system available for purposes of monthly and yearly reports. It needs to be applied with an intelligent understanding of its true meaning and significance.

With reference to the future operations of the statistical division of the Department of Agriculture the committee submits the following propositions and recommendations:

1. The work of the statistical division is of such importance to the agricultural interests of our country, and to the commercial affairs in the transactions of tradesmen in this and other countries, that the committee is impelled to urge the Honorable Secretary of Agriculture to give his favorable consideration to the need of securing for this branch of governmental service the strength and power of a bureau, at the earliest date practicable, with an increased appropriation if necessary, and that he lend his full influence for attainment of this end.

2. The working force under the statistician, including state agents, should be thoroughly reorganized on a sound business basis, recognizing qualification and giving certainty of efficiency in such service.

3. The committee unqualifiedly declares it inadvisable to entertain any plan for transfer of the work of the statistical division to any other branch of the government service, regarding it of great importance that it should have and should maintain distinctive powers.

4. In the crop-reporting work, the important aid which has been secured through the service of special field agents supports the view that there should be an increase in such service, to the extent of twelve or fifteen persons as a total number, with a chief in general charge, having direction of such branch of service.

5. In addition to the present method of inquiry as to comparative crop area on a percentage estimate, it is recommended that the statistician also provide in the schedules an inquiry for acreage estimates, for the important crops, requesting the correspondents to invariably furnish this information, which will serve as an important guide in reaching conclusions.

6. The method of reporting winter wheat and spring wheat conditions separately a portion of the season and subsequently as consolidated, should be so changed that such exhibits shall be given separately and consolidatedly to the end of the season.

7. In statements of condition and yield of wheat, it is recommended that in specifications of winter and spring grain distinctively the reports recognize areas by states, making the classification in accordance with the predominating characteristics in this particular.

8. The yearly final report of the leading crops by states, giving acreage harvested and production, should be accompanied by a statement indicating the differences between acreage planted and acreage harvested, where there are notable differences.

9. In reporting the estimated areas of crops planted or seeded, the statistician should definitely state the acreage figures as well as percentage comparisons.

On November 23, L. G. Powers, chief statistician for agriculture in the Census Bureau, authorized the following statement concerning the report of the committee of the National Board of Trade alleging that the census figures of farm acreage are grossly exaggerated:

The most important specifications under that charge, briefly summarized, consists of one general and seven specific items, as follows: The census figures show 101 counties, with farm lands reported "equal to or in excess of surveyed land surface of such counties. For Ohio 19 per cent of the number of counties are shown to represent 100 per cent or more of the entire surface in farm lands, in Iowa 17 per cent, Kansas 12 per cent, Kentucky 9 per cent, Missouri 9 per cent, Tennessee 6 per cent, Indiana 6 per cent, etc."

With reference to the specific statements quoted above concerning the seven states named, only two of the quoted statements can be substantiated as they stand in the report. Further, the committee, in making its report, did not possess statistics "of surveyed land" for a single state. These assertions can be easily established, provided the committee will give to the public the names and area of surveyed land of all the counties referred to by them. The statements of the committee with reference to the excess acreage in these seven states are more in excess of the facts than they allege the farm acreage in such states to be in excess of the true farm area.

Further, the so-called excess acreage actually reported by the census is in harmony with the facts, as a cursory examination of the same will demonstrate. In prosecuting its investigations the committee never made one inquiry of the chief statistician in charge with reference to the alleged errors here passed in review.

Secretary Wilson of the Department of Agriculture,

in his annual report to Congress, touches as follows on crop reporting and crop statistics:

"Two additional field agents have been appointed in the division of statistics with a view to further improving its crop reporting service, and the statistical expert, who for some years had charge of the crop statistics of foreign countries competing with the United States, has now been stationed in London, England, so as to be in close touch with the statistical officers of European governments, whose reports, together with authoritative commercial intelligence of interest to American farmers, he transmits to Washington by mail or cable."

The secretary further announces that the work of the division will shortly form the subject of a special report to Congress.

### INTERSTATE COMMERCE LAW.

As the date for adjournment of the present congress for final session approaches, interest in the fate of the amendments proposed to the interstate commerce law is revived by the effort of the executive committee of the St. Louis convention of November, 1900, to bring the matter to a conclusion. It will be remembered that several bills to amend the law were introduced at the last session of congress and referred to the appropriate committees. Hearings *in extenso* have also been had by both senate and house committees, which were concluded just before congress adjourned. At these hearings practically all branches of business directly interested in transportation were heard, all agreeing that reform of the law in some form was necessary.

The business world in the main supported the Nelson-Corliss bill, introduced through the instrumentality of the executive committee of the St. Louis Interstate Commerce Law Convention (St. Louis, 1900), while the Elkins bill, introduced by the chairman of the senate interstate commerce committee, received the support of the Eastern railway interests and apparently of the senate committee.

Afterwards a conference was called of the representatives of the railway interests and the St. Louis executive committee who agreed upon a bill which is now before both houses of congress for action. This bill embraces the essential features of the Nelson-Corliss bill, giving the Interstate Commerce Commission increased power to enforce its decisions and orders. The bill further makes it lawful for any two or more carriers to agree to make and maintain "just and reasonable rates"; but such agreements are subject to the supervision and control of the Commerce Commission. The St. Louis convention having taken no action on this point, the executive committee named will maintain a neutral position thereto in its campaign for the bill in general at Washington.

While the bill may not be as radical as some might wish to see placed on the statute books, the committee named believe it will be sufficient both to protect the public against unjust exactions and also to prevent undue advantages being extended to great industrial combinations, which have been the real offenders in the creation of special privileges as well as the chief beneficiaries thereof. The committee, therefore, urge the co-operation of all shippers in order to bring the bill to the attention of their members of congress through the latter's constituents directly.

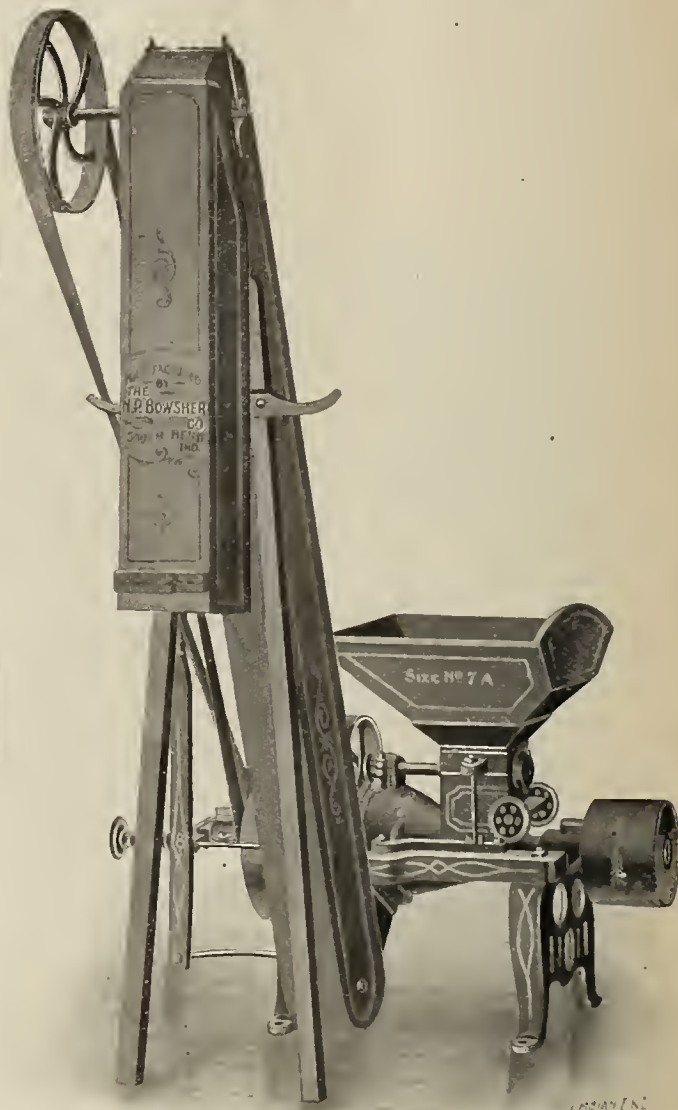
A number of hins in the big concrete elevator of the Peavey system at Duluth have been bonded for the handling of Canadian wheat, and the company expects to bring to Duluth considerably over 1,000,000 bushels. Receipts of Canadian wheat have begun at the elevators of the Consolidated Elevator Company and are expected to be quite free during the winter. This is a class of business that was not looked for at all on account of the completion from the grain country to Lake Superior at Port Arthur of the Canadian Northern road but the facilities of both this road and the Canadian Pacific for shipment to the lake and for storage there are proving inadequate for the great volume of grain sure to come forward on the crop.

### BOWSHER'S FEED MILLS.

There are some things that never grow old, in principle at least. Like Tennyson's brook, men may come and men may go, but they go on forever. Bowsher's Feed Mills seem to be of this class. No radical change has ever been made in them, though minor improvements from time to time have adapted the mills to changed conditions and increased their efficiency. They are time-tried and proven but always up-to-date. To anyone seeking a safe investment in feed grinding machinery the makers point with pride to their record.

Our illustration shows one size of the Bowsher Mill with haggling elevator attached. The elevator is a convenient affair that is furnished when desired, and in this shape it makes a complete, self-contained outfit; one that is very easily installed.

The conical shape of the grinders in the Bowsher Mills is one of their distinguishing features. They



BOWSHER'S FEED MILL WITH HAGGLING ELEVATOR ATTACHED.

run with light power. The spiral shape of the crusher knives for reducing ear corn secures a draw cut which reduces cob more easily than any system of crunching or rubbing. This feature is of special value in a season like the present one, when much of the ear corn is damp and immature. The same knives also make a force feed for small grain.

Aside from being superior mills on ear corn, the Bowsher mills are first class on oats and all kinds of small grain for feed. It is said that they do not glaze like a burrstone in handling this class of material.

There are dozens of other good points about these mills which the manufacturers explain in their pamphlet, which they will be glad to send to any interested party who applies. Address the N. P. Bowsher Co., South Bend, Ind.

As a preventive of the heating of corn in cribs it is suggested by a corn operator who has tried the experiment that tiling the corn when put in cribs will prevent decay and heating. The tiles can be put into the cribs crossways over layers of about two feet of corn, also run perpendicular about four to five feet apart. This gives plenty of ventilation, and the tiles absorb the moisture.



**SOME POINTS ON HANDLING SEED.**

Apropos the complaints in reference to the grading of seed at Toledo, Zahm's Circular says:

"Those who complain forget that the seed coming in now is mostly of an inferior quality and much poorer than the early shipments. Early in the season the seed was bright and of good color; now most of the receipts are of seed that was out in the rain; yet many shippers think there is no difference. They are mistaken. The seed is weather stained and much of it contains smartweed, ragweed, etc. The competition in buying from farmers in the country has been keen and many shippers have not examined the seed carefully enough and have paid too much for it and then they blame Toledo for not inspecting it No. 2 and having it sold at fancy prices. . . . Shippers are apt to base their purchasing price to the farmer on the top of the grade here, and that's where they are wrong as a rule. Make your price to the farmer on the basis of the lowest of the different grades here and pay no attention to the price of prime. The best way is to be free with your samples and get grade and value from us before you buy much of it or keep a sample of every little shipment you make and when you get our report of sale, make a note of the date and price it sold for. Then if you get any more seed in like it, you will be better able to judge what to pay for it."

As to the trick of drawing samples, the same authority says:

"We get numerous samples of seed every day, shippers asking us to make a bid on them. They claim they take a little out of each sack, mix it together, and send us an average sample of that. The result is that scarcely any of the seed comes equal to sample. It is not right to draw a sample from a poor bag and mix it with a sample of a good bag, and then expect the dealer at this end to take it that way. You should sort the bags and pile them up according to their quality. For instance, you have a 50-bag lot, 10 of which may be poor, 10 fairly good, 10 of it good seed, etc. After you have them sorted, send us a sample of each lot. It may be that the seed will all bulk up according to the sample you send, but the buyer does not want the seed that way. If shippers will do that, their seed then will run more like the sample."

"We would give this information because there is so much trouble in trying to get a correct sample. For that reason we scarcely ever make a bid on a sample, but prefer to have the shipper consign it. When one tries to sell the seed to arrive, the price is generally discounted about 25c per bushel on deferred shipments, and the shipper is fully able to take that chance as well as the buyer here. When the seed is put on the market here, you get the benefit of the competition of the seven or eight different buyers. You would be surprised at the difference between the highest and lowest bid on the same lot of seed. It will vary from 10c. to 50c. per bushel, and sometimes even more on the N. E. G. seed."

"A good many shippers do not like to consign, but we cannot but feel that if they will ship the seed as fast as they buy it, they are bound to strike a good average through the whole season, besides getting the benefit of the discount which buyers here make on seed to arrive. One of the largest shippers in Ohio wrote us some time ago saying that he had kept close tab on it for three years, and found that consigning made him money. There are times when you will strike a market that won't make you any money, and then again you will strike an advancing market that will more than offset it."

"A good many buyers here prefer to buy 20- and 50-bag lots when they would not look at a carload, and yet they would buy enough 20- and 30-bag lots to make several carloads and think nothing of it."

The total receipts of the state grain inspection department office at Duluth, Minn., which were \$22,502.12 for October, were the largest for a month's business ever noted at that office. The

report shows that the total receipts of wheat and coarse grains for October were 12,685 cars, flax, 7,623 cars. The shipments of wheat and coarse grains were 10,243,591 bushels, and 5,424,290 bushels of flax.

**ELEVATOR AT GENOA, ILL.**

Genoa, DeKalb County, Ill., is located at the crossing of the I. C. and C., M. & St. P. roads in a rich farming country, but until this fall has had no elevator, although different parties have "talked elevator" at various times during the past season. It was rather late in the year when Cohoon & Lawyer took hold of the proposition, but being in earnest they pushed the work of building so rapidly that although they were able to break ground only as late as August 3, they had their house ready for the machinery by August 24 and handled their first load of grain on September 6.

The building rests on a stone foundation twenty inches thick and rising nine feet above the surface level. The building was erected of 2x4's, cribbed,



COHOON & LAWYER'S ELEVATOR AT GENOA, ILL.

the deepest bins being 35 feet high. There are four bins of this depth and six others each 23 feet deep, giving a total capacity of 23,000 bushels. The cupola is 16 feet high.

There is a double dump to the sink in the basement, and elevators for handling grain and also feed stuffs, which the firm handles in large quantities, this being an important dairy district. In the cupola is a grain cleaner. The power is furnished by a gasoline engine, located in a brick building detached from the elevator.

In fact, the house is well built and perfectly equipped in every way for doing a large business at a minimum of expense for handling. The owners, Cohoon & Lawyer, handle seeds and coal as well as grain and mill feeds.

**OKLAHOMA DEALERS.**

The Oklahoma Grain Dealers' Association held a meeting at Guthrie on November 13, with the following members present: Henry Lassen, El Reno, president; A. T. Cruse, Geary, secretary; J. R. Bailey, Enid; J. O. Allen, Guthrie; A. L. Edward, Medford; A. V. Topping, Oklahoma City; W. T. Seaggs, Choctaw; R. W. Cochran, Choctaw; E. D. Humphrey, El Reno; A. J. Jackman, El Reno.

So far as the proceedings were made public they related to transportation questions.

**A CORN PROBLEM.**

In purchasing corn on the cob and newly husked, what percentage of loss of weight should be allowed, in order to make it equal to old corn? asks a correspondent of the Country Gentleman, who goes on to explain further: "I am buying a lot of corn from the field; seller proposes to allow 56 lb. to the bushel, cobs and all. I find that 33 oz. dries down in a warm kitchen to 28 oz., say 16 per cent. Should I not deduct 16 per cent from weight of corn, if sold at 56 lb. to the bushel?"

To the query the editor makes the following reply: "In the West, it is customary to take 70 lb. of corn and cob in the ear for a bushel, after the corn has dried out fairly well in the fall. A bushel is considered to be 60 lb. of shelled corn. In the great corn belt, corn dries out much faster in the fall than it does in our humid eastern climate. At this time of year, from 72 to 74 lb. of corn on the cob would be considered as equivalent to 60 lb. of shelled corn."

"It is now simply a matter of mathematics. If it takes 74 lb. of ear corn at this time of year to give 60 lb. of corn that is dry enough to keep in bulk when shelled, how many pounds of undried corn on the cob will it take to produce 56 lb. of shelled corn dry enough to keep in bulk? In your statement that 16 per cent dries away, we find no account taken of the cob. If the corn was dried on the cob, you have 56 lb. of corn and cob, and not 56 lb. of corn. The quantity of merchantable dried corn had better be computed according to the figures given above rather than by the method you have outlined, since it takes no account of the cob."

**A CORRECTION.**

The Rialto Elevator "A," illustrated in the November issue of the "American Elevator and Grain Trade," was built and is being operated by the Rialto Elevator Company. It was stated, though an error, that the elevator was owned and operated by the Nye & Jenks Grain Company, which is an entirely separate corporation from the Rialto Elevator Company.

An Iowa paper says that for the first time in many years corn has been sold by the ton in Clarion. The buyer pays from \$5 to \$6 per ton for it, either snapped or husked, and will feed it, of course.



**WHEAT ELEVATORS.**

Castles, or Titans' houses, or huge fanes  
Of ancient gods that yet compel men's fear—  
What powers, what pomps, do these betoken here  
Looming aloft upon the plow-seamed plains?  
Souls of ripe seasons and spirits of sweet rains  
Flock hither; and the sinewy yellow year  
Heaps their high chambers with Pactolian gear  
More precious than those golden Lydian grains.  
Nor fortresses, nor demi-gods' abodes,  
These are upraised to well feared deities  
Whose power is iron and whose splendid sway  
Is undisputed now as when great Rhodes,  
And Tyre, and Carthage, flourished serving these,  
Or Joseph stored Egyptian corn away.

—Arthur Upson.

**COMMUNICATED**

[We invite correspondence from everyone in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

**FROM OHIO.**

*Editor American Elevator and Grain Trade:*—  
The corn crop average is large and yield from 30 to 90 bushels per acre. It was late in maturing and there is some soft and rotten corn where it was cut too green.

Cars are scarce and hard to get. At many stations dealers have not had a car for three weeks.

Yours truly, JOHN McLEAN.

Hagler, Fayette Co., O.

**WHERE THE SHIPPERS' RESPONSIBILITY SHOULD END.**

*Editor American Elevator and Grain Trade:*—  
I think that when the grain shipper delivers to the buyer his responsibility should cease. The buyer has it in his hands and if he does not bill it out immediately he should be the loser if any loss occurs. Grain that is billed through to destination generally goes without much delay and that is the proper way to handle it.

Respectfully, T. T. BEATTY.

Rattlesnake, Ohio.

**SHOULD INSPECT AT ORIGINAL DESTINATION.**

*Editor American Elevator and Grain Trade:*—  
There has been no complaint in this locality that I have heard of about grain being rebilled after reaching its point of first shipment. The writer's opinion is that the shipper should not be held responsible when grain is rebilled from its first destination. If rebilled, it should be inspected and if found to be cool and sweet and of the grade sold, then the responsibility of the shipper should end.

Yours truly, D. BURNS.

Hagerman, O.

**SHIPPERS SHOULD LIMIT THEIR LIABILITY.**

*Editor American Elevator and Grain Trade:*—  
We have had no trouble with rebilled grain for the reason that we sell for grades and weights at a given point. After that our responsibility ends. We do not think the shipper should be responsible for rebilled grain. The only way we see out of such trouble is for shippers to refuse to sell to receivers who rebill at shippers' risk, or to state in acceptance that our responsibility ends at first destination.

Yours truly,

THE F. O. DRIVER GRAIN CO.  
Middletown, O.**WHERE SHIPPER'S RESPONSIBILITY SHOULD END.**

*Editor American Elevator and Grain Trade:*—  
I am unable to say whether or not there have been any losses from rebilling. In fact, there has been no new corn handled yet, at least not in any quantity.

As to the responsibility, my opinion inclines to placing it on the one who rebills. Had the shipper been informed that his grain was to go into New York or New England he would not have made the sale. When the sale was made for shipment to, say Pittsburgh or Buffalo, he felt sure his grain would

carry that far and that is where his responsibility should end. How to remedy this custom I am hardly able to say.

Respectfully, T. B. MARSHALL.

Kirkwood, Ohio.

**INSPECTION AT NEW ORLEANS.**

*Editor American Elevator and Grain Trade:*—  
Enclosed please find clearances of grain through the port of New Orleans during the month of November. All the grain, with the exception of 32,000 bushels of wheat on the S. S. Porteo, was inspected by the inspection department of the New Orleans Maritime & Merchants Exchange, Ltd.

Since the opening of our department on July 1, 1902, up to December 1, we inspected 8,528,144 bushels of wheat, 155,938 bushels of corn and 13,928 bushels of rye.

The grain inspected outside of this Exchange during this period amounted to 182,000 bushels.

Yours very truly, FRED MULLER, Sec'y.

New Orleans, La.

**NEW ILLINOIS ELEVATORS.**

*Editor American Elevator and Grain Trade:*—  
We are putting up a new elevator at a new town on the Alton between Lacon and Varna, called Held. The name of the new company will be Hopewell Grain Company, with J. A. Simpson, F. N. Rood and John Fehring as equal owners. John Fehring will have charge of the business there. Mail will have to be sent to the company at Varna, Ill.

Also, we have purchased the elevator property at Varna, Ill., of Merritt Bros. and will put Mr. A. H. Schumacher there with a third interest. This company will be called Marshall County Grain Co. and will deal in grain, seeds, coal, stone, etc.

Yours very truly,

F. N. ROOD, Manager.

LaRose, Ill.

LaRose Grain Co.

**THE LOWER GATEWAYS ASSOCIATION.**

*Editor American Elevator and Grain Trade:*—  
In your issue of November 15, page 229, the object of the Lower Gateways Association is not correctly stated. This organization was formed to put a stop to shrinkage at Louisville and Cincinnati, which has existed for a number of years. The matter has been under investigation by the railroad companies and was by them submitted to Mr. Faithorn for arbitration. His decision did not remove the shrinkage, but retained it as it formerly existed, and to offset the advantage accruing to Louisville and Cincinnati, placed a tax of 1 cent per hundredweight on business reconsigned through these gateways. This makes some improvement in the former conditions, but we feel that if the shrinkage is just, there should be no tax placed upon it; and if the shrinkage is unjust, it should be abolished.

The meeting held in St. Louis was to protest Mr. Faithorn's decision because it did not entirely remove the shrinkage, and was not a protest against any new condition created by his decision.

Yours truly,

J. B. MAGEE,

Secretary Lower Gateways G. D. Ass'n.

Cairo, Ill.

**DISSATISFIED WITH REBILLING.**

*Editor American Elevator and Grain Trade:*—  
Relative to the losses occasioned shippers by the rebilling of grain after it reaches its initial destination, will say that we have had some experience along that line and were very much dissatisfied with the matter.

We sold to arrive at Columbus, Ohio, and believed the corn would be inspected and weighed at Columbus. Instead it went to Wilkesbarre, Pa., or some other point, and into hands that I believe have a systematic way of shortening the car's out-turn. These parties could not get a second car from me if I knew it, knowing as I do that our certified amount was in the car.

The treatment we get at the hands of the track buyer, as a general thing, leads us to hope for a better system in selling our grain. We certify and swear to the amount of grain put into the car. The party to whom the track buyer sells it swears

it did not contain that amount. The track buyer forwards to us the claim papers and feels sorry but expects us to pay the amount demanded, which we generally do, although very reluctantly.

Very truly, G. P. TEEGARDIN.

Ashville, O.

**WILL HANDLE GRAIN AND HAY.**

*Editor American Elevator and Grain Trade:*—  
It gives us great pleasure to announce that owing to the volume of inquiries we have been receiving from the Eastern and Southern territory for rock bottom values on grain, we were compelled to open up a hay and grain department in connection with our milling business. We are now in a position to meet all comers.

We have taken your journal for quite a long time and find it a very interesting paper.

Yours very respectfully,

PERIN BROTHERS,

Cincinnati, O.

By G. G. Ortendorf.

**DO NOT GIVE DESTINATION GUARANTEES.**

*Editor American Elevator and Grain Trade:*—  
Relative to losses on rebilled grain will say we had some trouble with oats sold to Columbus, Ohio, parties and reconsigned.

Have shipped no corn yet but will be obliged to store some early next week. Our rule is to draw full amount on each car, then if a shortage claim is presented, turn it over to the railroad agent with our weights and certificate of same. If we ever get anything from the railroad we turn it over to claimant.

We take no risk on quality or condition of grain as we keep it in the house until it is in condition. We sell on track by sample, so you see we do not guarantee conditions at destination. We could not live six months in the hands of the general run of commission men if we undertook to do that.

Yours respectfully,

E. M. FULLINGTON &amp; CO.

Milford Center, O.

**A CONSOLIDATION AT ST. LOUIS.**

*Editor American Elevator and Grain Trade:*—  
On June 1, 1902, G. L. Graham & Co. assumed the management of the Dayton-Wooster Grain Co. on account of the illness of Mr. Dayton. For the same reason, this arrangement has been made permanent by the entire absorption of the Dayton-Wooster Grain Co.

The name, Dayton-Wooster Grain Co., will be discontinued and their business will be continued by G. L. Graham & Co. There will be no change in clerical force or salesmen, the employees of the Dayton-Wooster Grain Co. for the past five years being retained.

The friends and patrons of the Dayton-Wooster Grain Co. can rest assured that the only change, so far as they are concerned, will be in name, and all business entrusted to G. L. Graham & Co. will be handled precisely the same (as it has been for the past five months) as though the Dayton-Wooster Grain Co. had remained in business.

Yours truly,

DAYTON-WOOSTER GRAIN CO.

C. S. Dayton, Pres.

G. L. GRAHAM &amp; CO.

St. Louis, Mo.

**DESTINATION SHOULD BE SPECIFIED.**

*Editor American Elevator and Grain Trade:*—  
We have heard no complaint whatever this fall from shippers over losses on grain reshipped after reaching its point of first shipment. There has been practically no corn shipped from this territory.

In our opinion, the shipper's responsibility should end in accordance with contract. We do not consider it necessary to take steps to bring about a reform in present custom. If shipper sells corn for delivery to New England, guaranteed to arrive cool and sweet, his responsibility can only end when the corn has reached destination. If he sells it to go to Pennsylvania or New York, the same statement will apply. If, on the other hand, he makes sales guaranteeing the corn to arrive at destination cool and sweet with nothing being said



about destination, the car can be sent to any point purchaser may desire and shipper is responsible until final destination is reached. In purchasing corn we agree with shipper where his grain is to be shipped.

We consider this a matter which can be easily regulated and one that concerns only the buyer and seller and not one for any association to govern.

Yours truly, DEWEY BROS.  
Blanchester, O.

#### SCALES CONTROLLED BY ST. LOUIS MERCHANTS' EXCHANGE WEIGHING BUREAU.

*Editor American Elevator and Grain Trade:—*  
The following is a full list of the elevators, mills and wagon scales under control of the St. Louis Merchants' Exchange Weighing Bureau, as furnished by Jas. H. Warren, acting supervisor of weighing for the Merchants' Exchange:

##### IN ST. LOUIS, MO.

Burlington Elevator .....16 hopper scales  
Rogers Elevator ..... 2 hopper scales  
Mississippi Valley .....16 hopper scales  
Brooklyn Street Elevator.....1 track scale  
Merchants' Elevator ..... 6 hopper scales  
Central B Elevator.....12 hopper scales  
Exchange Elevator ..... 2 hopper scales  
Wabash Elevator ..... 1 hopper scale  
Victoria Mills ..... 2 hopper scales  
Purina Mills ..... 1 hopper scale  
Plants Mills ..... 1 hopper scale  
Eighth and Gratiot Streets.....1 wagon scale  
Tyler Street .....1 wagon scale  
Compton Avenue .....1 wagon scale  
Seventh and Cerre Streets.....1 wagon scale  
Main and Carr Streets.....1 wagon scale

##### IN EAST ST. LOUIS, ILL.

Belt Elevator .....2 hopper scales  
Columbia Elevator .....2 hopper scales  
McReynolds Elevator .....5 hopper scales  
Kehlor Mills .....1 track scale  
Chicago & Alton.....1 wagon scale

In addition to the above there is one prospective wagon scale to be erected in Wabash Yards at North Market street in St. Louis, Mo.

Yours truly, G. L. GRAHAM & CO.  
St. Louis, Mo.

#### THE SOUTHERN TRADE.

*Editor American Elevator and Grain Trade:—*  
I have had little or no trouble in buying from Northern and Western shippers, and reshipping into the Southern territory. My business at both ends of the line have been quite satisfactory. In the first place, I make my purchases from responsible parties or firms, and in reshipping I ship only to responsible parties. When I have anything offered me in my line from parties that I have had no dealings with, I investigate their responsibility. I do this by inquiry and referring to mercantile agencies. If I am not satisfied, I require parties offering to furnish satisfactory references. If they do this, and their prices are in line, I make purchases from them in a small way until I am satisfied that they are straight. I do likewise in reshipping into Southern territory, but even with these precautions one will get mixed up every now and then as in any other business, but so far as my business is concerned, I can assure the readers of this paper that I have reduced to a minimum any losses that may arise.

In establishing brokers, I require a broker to give references. I write these references and if satisfactory, will then give the broker a trial. If I feel that he comes up to requirements, will allow him to represent us, first making it plain to him that all business he may secure on our behalf must be subject to our confirmation. We do this because we want to know something about the purchaser before confirming a sale. I think the trouble arising between the Northern and Western shippers with the Southern receivers is due to so many of them trying to do business on too small a capital, which places them in a position not to be able to carry out their contracts as they should. When they reach this stage, they think almost "any old thing" will do.

There are some shippers that are full of this idea, and they false load a car of hay or grain, and the consequences are they have rejections at

destination. These shippers I call "calamity howlers." They spread the news broadcast and quite frequently give an upright receiver a bad name. As the masses are ready to accept such news from a shipper, they come to the conclusion that shipping South is a dangerous and unprofitable business. Competitors for the business are more apt to tell of the bad qualities of a receiver than to say anything of his good qualities. He is afraid to say anything at all about the upright receiver for fear his competitors will snatch the trade from him, and the consequences are that it is rumored around that the South is not a desirable market and this keeps the more timid shippers from working the Southern territory. I know of one instance where one of the largest shippers in the country stated to the writer that he would not ship one pound of goods to a certain Southern market. It was afterwards my pleasure to reside in that city and much to my surprise, I found it was his best market. He had been shipping to that market for years.

The Southland is a great field for honest shippers. Simply investigate your receivers and follow the old saying, "Do unto others as you would have them do unto you." Ship what you offer and in specified time, and it will leave no room to have your shipments turned down on you. In offering, state your terms; in fact, leave no loop-hole for a receiver to get through, and it is my opinion that rejections will be very few and far between. I follow this rule and have very little trouble. Why can't you? The South is brim full of honest men and they are ever ready to do business with honest people.

Yours truly, JNO. W. FULGHUM.  
Memphis, Tenn.

#### METHOD OF ACCURATELY TESTING HOPPER SCALES.

*Editor American Elevator and Grain Trade:—*  
For the information and betterment of the grain trade, we submit the following letter, which explains itself:

Parsons & Edwards, Philo, Ill.

Gentlemen: We have your favor of the 28th and note that you have always invoiced your corn to us at your actual hopper scale weights and that your hopper scale runs short about 2 bushels on 500 bushels from your wagon scales. We believe that by an accurate test you will find that both your wagon and hopper scales are weighing too heavy as all of your cars have been running about the same and about 5 to 6 bushels short at both our Decatur and LaFayette mills. Mr. Sprague, of Moore & Sprague of Bement, Ill., was in our office yesterday, and he remarked how close we run together with them on weights, and that he weighed every car carefully on hopper scales and gave us the actual weights.

We enclose you herewith a statement of 14 cars shipped us by them, taking all the cars they shipped to our mills from February 15 to April 29, and the last three cars shipped by them since August 1. We leave out a large number of cars shipped between April 29 and August 1, which averaged about the same, but the whole account would be unnecessary. You will notice that there was 14,425.01 bushels loaded in the 14 cars and that we returned to them 14,432.48 bushels, being 7.47 bushels more than they invoiced to us. Four of the cars, invoiced at 3,903.52 bushels, came to our Decatur mill and weighed out 3,903.32 bushels, being short but 20 pounds. Ten of the cars, invoiced at 10,521.05 bushels, went to our LaFayette mill and weighed out 10,529.16 bushels, being an overrun of 8.11 bushels. You will notice that there was not a variation to exceed one bushel in the majority of the 14 cars, and not to exceed three bushels except in three of them.

We note that you have a 50-lb. government weight in your office and test your scales. We were in the grain business several years before we discovered that a pair of wagon or hopper scales could not be tested with a 50-lb. weight. You can set a 50-lb. weight on your scales and then add ½ pound or even 1 pound and there would be no perceptible

difference on your beam. A variation of even ¼ pound which will not be noticeable on your beam amounts to 400 pounds on a 80,000-lb. car or 7.08 bushels more than your average shortage with us. You can test your scales with a 50-lb. government weight by first testing a small platform or counter scale and finding the small scale correct.

Then weigh up 500 pounds in bags of 100 pounds each and drop the corn into your shelled dump hopper and elevate to your hopper scales and weigh. Then weigh up 500 pounds more on the small scales and elevate to hopper and weigh, and continue weighing in units of 500 pounds until you have reached the capacity of your hopper scales. Then weigh up the 5 empty bags carefully and multiply by the number of the 500-lb. draughts shown by your hopper scale weight as well as your small scale weight and you have the net weight of the grain for comparison. Please make the above test and we think you will find the discrepancy and when you do, kindly let us know and also make known the result in your next local meeting of grain dealers.

We know of one instance where a country shipper used a scale with a spliced lever which had been weighing too heavy for years. This shipper's weights would not hold out anywhere, which you say has been your experience. The shipper cribbed some corn for a Chicago firm and when it was shelled out the shortage was too great, and upon investigation the trouble was located.

Yours truly, SUFFERN, HUNT & CO.  
Decatur, Ill.

#### REBILLING SHOULD NOT BE AT SHIPPER'S RISK.

*Editor American Elevator and Grain Trade:—*  
Regarding complaints over losses to shippers from grain being rebilled after reaching the point of first shipment, will say, I could not mention any that has occurred to my knowledge this season. However, I believe this is on account of there being very little if any corn shipped east unless it went direct for export, up to the present time.

There is no question but what dealers are losers where they should not lose, but I cannot say that it is not their own fault. If in selling grain delivered Boston and the receiver diverts it, the shipper should hold the receiver right up to his agreement; he did not sell the grain to be diverted but sold it to be delivered at a certain point. When the grain arrives at that point that is the end of the shipper's contract; if it is diverted from that point to other points the receiver is the one to be responsible for the condition of arrival. The great trouble is, they frequently claim they did not examine the corn on arrival at its original destination but that it was in the same condition when it arrived at its diverted destination as it was at the original, especially if anything should be wrong about it, and it is a pretty hard matter to disprove such a claim. If the shipper would insist upon inspection at the original destination, that would all be obviated. No shipper should sell corn to be rebilled in the early season; in fact, it is bad policy at any time.

As to when the shipper's responsibility should end, will say it should end when the grain is delivered at the point where the shipment was sold to be delivered at, and the only remedy that there is, is to insist upon that kind of a sale when sales are made, and you will soon stop the diversion of grain to the disadvantage of the shippers.

Very truly yours, H. S. GRIMES.  
Portsmouth, O.

The S. Y. Hyde Elevator Company (La Crosse, Wis.) suffered a loss by a forgery at its station at Madison, S. D., recently. It appears that three blank checks had been torn out of the book at the elevator and made out for No. 2 wheat at 56 cents a bushel, a price which did not prevail there on that day, to the amount of \$280 in all, and were cashed at the regular place of payment of the elevator's checks. In the rush of business the young lady cashier did not notice anything amiss in the checks and does not remember particularly the description of the parties who cashed the checks.



## MISSOURI DEALERS JOIN THE GRAIN DEALERS' UNION.

A good-sized delegation of grain men from stations along the lines of railroad that gridiron northern Missouri met at Moberly on the afternoon of December 4 to consider the proposition of organizing a state association of grain dealers or of joining the Grain Dealers' Union of Southwestern Iowa and Northwestern Missouri, which was already at work and which has been of great benefit to dealers throughout that territory. It was felt at the meeting that the time was not yet ripe for organizing a Missouri state association; and it was decided to join the Union and secure the privileges and aid of that organization until it was felt that the dealers could support a state association.

The following firms applied for membership and many more are expected to join before the next meeting: A. F. Owen & Son, Brunswick; Jno. H. Wayland & Co., Forest Green and Lewis Mill; Wilder & Pearson, Zaddonias; Salisbury Milling Co., Salisbury; R. H. Seaman, La Belle; E. H. Algermissen, Montgomery City; H. F. Kircher, Leroy and Ashton; Jas. H. Wooldridge, Boonville; Moore & Lee, Old Franklin; J. L. Klingenberg, Concordia; Winterbower & Canole, Overton; Baggerly Milling Co., Odessa; Cobb & Varner, Odessa. President D. Hunter of Hamburg, Iowa, and Secretary Geo. A. Stibbens of Chicago were present.

The meeting was called to order at the Merchants' Hotel at 2 p. m.

President Hunter spoke as follows: "It affords me a great deal of pleasure to meet so many in the grain business. I have made a stereotyped talk to grain men in our territory for a long time and I am glad to have some new people to talk to. If your conditions were like ours several years ago you need an association." [A voice, "They're just as bad."]

Mr. Hunter gave a review of the conditions that existed in the Iowa territory before the Union was formed and the steps leading to the first meeting at Creston, which was attended by nine people. At Red Oak thirty days later thirty were present and they organized with a membership of nineteen. He told of the discouraging features of the first meetings and the war that was made upon scalpers. They finally convinced receivers at all markets that it was best to deal with regular shippers who were in business at stations all the year round. In about a year they had about got the best of the scalpers, when they ran up against the scalpers in the receiving markets, those who bought from farmers and the like. It took two years to convince those men that they were wrong; but they finally did convince them also that they were making a mistake. To-day, said the president, elevator property is worth 100 cents on the dollar, where before it wasn't worth 25 per cent. All this resulted through work of our association. Now we are working on one basis. You now see why we organized and the difference between the former time and to-day. If your conditions are the same, you should organize or join some association.

A paper was read by Secretary Stibbens on the value of grain associations to the country grain dealers.

President Hunter introduced Geo. A. Wells, secretary of the Iowa Grain Dealers' Association, who spoke as follows: "Mr. President and Gentlemen: President Hunter has taken the position of 'Father of grain associations' in Iowa, but the pollen has spread and now our state association is the biggest baby in the bunch. This is the first time I have stopped off the cars into Missouri aside from your larger border cities. The objects and purposes of our association are very clearly outlined and I might state them briefly as follows: First, protection of regular dealers against scalpers. I notice that your first work will be to establish facilities at shipping points, as I find that dealers in your territory are largely without facilities. We aim to keep a list of regular dealers of our territory in the hands of those entitled to them and to publish them and to publish monthly bulletins showing

changes. We have tried to work as friendly as possible with dealers in the central markets. I think if you would organize and establish elevator facilities you can reap all the benefits which other associations have secured.

"Another purpose of our association is uniform methods of buying, shipping and handling grain at local points. Some grain dealers have a habit of doing all kinds of unbusinesslike things, such as giving free storage, etc., in order to hold customers. All this is not necessary, as there is only so much grain to handle and it should be done at a reasonable profit. We hold frequent local meetings in our territory which results in giving confidence. A public sentiment will not allow you to incorporate in your rules anything tending to control prices, and to my mind no association should be organized with only this purpose in view.

"Another purpose is arbitration and the equitable arrangement of differences between dealers and shippers. It has not been easy to get all members to arbitrate and we have been obliged to discipline those members who refused to arbitrate.

"Another purpose is the correction of abuses and the adoption of improved methods at terminal markets. Included in these are policing of railway yards, supervision of weights, sealing of cars, etc. A shipper wants his grain to receive careful attention and receivers want to be fair, but they don't pay the freight. That is done by the shipper. Affiliation with the National Association will bring these matters to a better condition in terminal markets.

"Another purpose is protection against unjust and unreasonable legislation. I suppose there is in Missouri sometimes the chance of bills being presented before the state legislature which would be inimical to the grain business if they became laws. In Iowa we suffered for years from the landlord lien law, but we succeeded in getting relief from it mainly through our association.

"Another purpose is the dissemination of information of general matters pertaining to the grain trade among its members. This will depend upon the secretary, and in Iowa we generally have something to say that is of interest to somebody. At our annual meeting last year we were able to report no delinquent members, and I think it was because we keep close to members by this means. We also publish a crop report. I think this is the day of associations and that all grain men should secure association benefits."

Mr. McFarlin: Realizing that more than half of the dealers here do not have facilities, I would like to ask Mr. Wells what he would do in the interim while such facilities are being established.

Mr. Wells said he did not think that the rules should be rigidly enforced at this time.

Mr. Stibbens said there were in the Union those who were regular buyers who had no elevators, but that business was confined to the regular dealers who did business with a scoop shovel.

Mr. Hunter: According to our by-laws any man who is regularly engaged in business who maintains an office and who does business the year around is a regular dealer. Mr. Hunter also said in reply to a question that when receivers refused to do business with regular dealers and bought outside, the matter was referred to the secretary for action.

Mr. McMillan thought it would be a good thing for all dealers to make themselves regular by securing leases from the railroad company.

President Hunter mentioned various reasons why it would be well for Missouri dealers to organize.

F. M. Cutler of Carthage, Ill., gave a short talk telling what the Illinois state association had done for dealers in that state.

William Pollock of Mexico, Mo., told of the good results that had followed after the millers of Missouri had organized; and he thought that grain dealers would also be benefited by starting an association.

R. S. Young made a motion that the dealers present take steps to become members of the Grain Dealers' Union.

The question was discussed by Messrs. Pollock, Wayland, Wells, Hill and Stibbens whether the Grain Dealers' Association of Iowa would receive as much support and prove as advantageous as a state association. It was felt that it would be better to become members and secure the advantages of a membership in the Union at this time. Secretary Stibbens assured the dealers that whenever the time seemed propitious for their forming a state association the Union would bid them God-speed and aid them in any way possible toward a new organization.

M. F. Hackett of Fairfax, Mo., who said he had been a member of the Union for six years, had much to say in praise of the work which it had done and of the valued services which had been performed by its officers. He thought it was best for Missouri dealers to take advantage of the aid offered by the Union and of the experience of its officers.

Mr. Hunter put Mr. Young's motion and it carried by a unanimous rising vote.

An invitation was extended to the dealers to visit the club rooms of the Moberly Commercial Club in the evening, and after a motion made by Mr. Wayland had been carried that a vote of thanks be extended to the Missouri Grain Company for the luncheon served to the dealers, the meeting adjourned.

### MOBERLY NOTES.

F. M. Cutler attended the meeting from Carthage, Ill.

Missouri dealers should take advantage of the welcoming hand offered by the Union.

A representation from the Toledo (Ohio) market was present in the person of W. W. Knight with Reynolds Bros. of that city.

The Missouri Grain Company held "open house" at its new transfer elevator, which was inspected by the majority of the dealers who attended the meeting.

Des Moines sent a delegation consisting of W. F. Morgan, Geo. A. Wells, M. McFarlin, N. Hodson, J. W. Hill, H. H. Lantz, Charles Gilchrist and F. McMillan.

Nearly all the dealers were the guests of the Missouri Grain Company at a 12-o'clock luncheon at the Merchants' Hotel; and while the early call for the meeting shut off the after-dinner cigars, Mr. Wilcox took care that all dealers should be well supplied during the afternoon and evening.

A pleasant evening was passed by the dealers at the rooms of the Moberly Commercial Club. They were received by J. R. Lowell, president of the Club and editor of the Moberly Democrat. Other prominent business men of the town were present who aided in making the evening for the visitors a pleasant one. The billiard and card tables were utilized, new acquaintances were formed and it was with regret that the grain men after a pleasant evening took their departure.

The commission men who came out from St. Louis included the following: G. W. Crump, representing Daniel P. Byrne & Co.; J. A. Connor, of Connor Bros. & Co.; W. C. Seele, representing P. P. Williams Grain Co.; H. F. Ketchum, with Langenberg Bros. & Co.; C. L. Wright, with J. L. Wright Grain Co.; R. S. Young, with Funston Bros.; W. H. Johnson, with Eaton, McClellan & Co.; G. L. Graham and S. T. Marshall, of G. L. Graham & Co.; John Mullally, of John Mullally Commission Co.; Harry Hunter, with Chris. Sharp Commission Co.; P. J. Barron, with D. E. Smith & Co.; S. B. Whitsett, with Smith, Vincent & Co.; T. C. W. Taylor, with Brinson-Judd Grain Co.; W. W. Powell, with Sherry-Bacon Grain Co.; J. A. H. Chisholm, of Siemers & Chisholm; John A. Warren, of Warren & Co.

Among the Missouri dealers present were: S. J. Leach, Salisbury; J. B. Hurt, Armstrong; O. M. Harrison, Glasgow; J. B. Bartee, Clark; Wm. McMahon, Dalton and Shenandoah, Iowa; C. E. Porter, Carrollton; W. S. Coulter, Macon; W. M. Moore, Kingsbury; Harry Plattner, Salisbury; W. Pollock,



Mexico; M. F. Hackett, Fairfax; J. S. Klingenberg, H. F. Kircher, Ashton; Luther Crump and G. W. Crump, Centralia; F. W. Walter, Corning; C. W. Hopper, Sumner; E. P. Peck, Lathrop; S. H. Marshall, Moberly; J. H. Wooldridge, Boonville; L. B. Wilcox, Moberly; A. Fisher, Edina; Fred Blattner, Wellsville; Z. F. Cobb, Odessa; C. A. Wilder, Ladonia; T. J. McNabb, Salisbury; Jno. H. Wayland, Salisbury; E. P. Peck, Lathrop; C. E. Gorman, Waukenda; T. E. Griffith, De Witt; Chas. F. Owen, Brunswick; F. G. Jacobi, Martinsburg; A. F. Rowans, Benton City; D. M. Wilson, Milan.

### THE KAY-PIM MANUFACTURING COMPANY'S PLANT AT ST. LOUIS, MO.

Buildings designed with especial regard to receiving the best possible light, a machinery equipment that embraces the most modern tools, and men and brains with experience to carry on the business, are the essential features of the new Kay-Pim Manufacturing Company's plant which is shown in the accompanying illustration. The plant is now being completed at No. 2300 North Broad-

The power house is a separate building. It is equipped with tubular boilers provided with Hawley Down-draft Furnaces, Russell Automatic Engine and large Curtis Air Compressor.

The office is a large two-story stone building. On the upper floor is located the drafting room, which has plenty of light and is conveniently arranged. The first floor is divided into private offices for the various officers of the company and has separate room for the order and bookkeeping departments.

The company's private switch to the railroad lines enters in the rear of the building.

One of the features of the plant specially worthy of notice is the fact that all manufacturing is conducted on the ground floor.

The officers of the company are A. H. Kay, president; C. A. Pim, vice-president and treasurer; Robert S. Johnson, secretary; E. G. Richards, general superintendent. Mr. Kay was until recently secretary of the Weller Manufacturing Company of Chicago and has had about fifteen years' experience, in which he has studied closely the needs of the mill and grain elevator trade. Mr. Johnson has been for a number of years connected with W. E. Caldwell Company of Louisville, Ky., and is well

### WHY RECEIVERS SHOULD SUPPORT THE NATIONAL ASSOCIATION.

[A paper by W. T. McCray of Kentland, Ind., read before the annual meeting of the Grain Dealers' National Association at Peoria, Ill., on October 2, 1902.]

I have not had the time to give the subject such thought as should be spent upon a paper to be read to such a representative gathering of bright business men; but I will offer a few reasons which have occurred to me why the receivers should encourage organization and be active supporters of association work. It would seem that the benefits are so apparent that it would require no argument to demonstrate the truthfulness of the proposition. The opportunity offered for the shipper and receiver to meet and become acquainted; the advantage of the advertisement a receiver can secure at such a meeting; the benefits of the exchange of ideas and the discussion of different trade problems, are some of the points which we will consider and which are of sufficient importance to prove that the receivers can not afford to refuse to affiliate with us.

We are each component parts in the great chain of business affairs. The shipper cannot get along without the receiver any more than the receiver can get along without the shipper. Each branch of the business depends upon the other for success. Each has his place to fill and the machinery would be incomplete if we had one without the other. Their interests are so identical that it could not be but beneficial for these branches of the trade to get together on the most friendly terms. Their gatherings afford a common meeting place where we assemble and meet those with whom we have business relations; acquaintances are made; friendships are formed which will remain steadfast forever. We who have attended and participated in these meetings since the organization of this Association can testify to the mutual good that has come from them, which is manifest in the improved trade conditions throughout the land. Great benefits have been obtained both from a social and a business point of view and its influence has been felt and will continue to expand as we grow in importance and power.

The spirit of fraternity has been strong in the natural instincts of man since the creation of society. From the early history of the human race men have banded together for their mutual protection and profit. This spirit has recently become prominent in the commercial world and the tendency of the period toward centralization, consolidation and organization. The commission man, the receiver and the broker each occupies an unique and important place in the affairs of the shipper. Each is really the trusted and confidential agent of him who originates the shipment, and is bound by the stern laws of commercial conduct to put forth his very best efforts to realize well upon his trust and to handle the business of his client in exactly such a manner as he would his own.

There is and has always been honest differences between men who earnestly desire to do what is right. The time is fast approaching when nations as well as all classes of men will seek to settle all disputes and differences by arbitration. This is one of the great possibilities of organization; and at our last meeting suitable rules were adopted which provide for the arbitration of all differences between its members. This was an important step, and its equitable provisions should be taken advantage of in the settlement of any differences between the shipper and the receiver. There is still another reason which should have a potent effect in determining the receiver to cast his influence in favor of the Association and give it his hearty support in every way possible.

One of the great benefits of organization is that dishonest dealers are forced out of business and the receiver's risk is correspondingly decreased. The custom of paying drafts based on shipments in many instances was formerly attended with much risk and many times the receiver found himself in the embarrassing position of having honored and



VIEW OF THE BUILDINGS OF THE KAY-PIM MANUFACTURING COMPANY AT ST. LOUIS.

way, St. Louis, Mo. Its size is such that it covers almost an entire business block, extending from Broadway east to Second street, and from Monroe street on the south a distance of 200 feet north. It is located on the Wabash Railroad and St. Louis Terminal Railway's tracks, the latter being the belt line which taps all railroads in St. Louis and East St. Louis.

The warehouse and building for manufacture or sheet metal work is the building seen in the foreground of the illustration. It is 175x60 feet, and will be equipped with machinery for the manufacture of sheet metal goods for the grain elevator trade. The machine shop adjoins this building. It is constructed with a steel truss roof and has galleries front and rear which may be extended whenever the trade demands the extra service. It will be heated by the Sturtevant Hot Blast System and equipped with latest improved tools, including a large Betts Boring Mill, Bullard Boring Mill with turret heads, Gisholt and other lathes of late type and a traveling crane in addition to a complete system of pneumatic hoists for handling lighter work. The building's dimensions are 200x75 feet.

The foundry joins these buildings in the rear and is 150x60 feet. It is equipped with late improved moulding machines for making pulleys, bearings, sprocket wheels, etc., hand moulding being almost entirely eliminated. Its equipment also includes cranes, pneumatic hoists and large Collian Cupola. Just beyond the foundry, in the rear, is a building for the storage of patterns.

known in the machinery trade of the Louisville territory. E. G. Richards, who was formerly superintendent of the machine shops of the Dodge Manufacturing Company of Mishawaka, Ind., is a man of wide experience in the production of high-class machinery and is one of the best known mechanical men in the West.

The new plant is intended to meet the wants of the rapidly developing centrally southern and southwestern territory, and will enter the field with the opening of the new year, being now prepared to enter orders for the delivery of all kinds of work after January 1, 1903.

Of all the wheat elevators that thirty years ago lined the levee at Red Wing, Minn., only that of John Danielson now remains. A local chronicler says: "In the big year, 1870, a dozen sheds were built to accommodate the overflow of eleven warehouses and a million bushels waited the opening of navigation in the spring. Main street for three blocks was choked day after day with farmers' teams waiting their chance to unload, standing so thick that no team could pass. Farmers began to race their teams two or three miles out of town in order to get a favorable place in the long queue. Buyers on horseback met them and bargained for one or another of the warehouses. They began at 5 a. m. and were busy till 11 at night. Farmers started in the night and arrived long before day-break or got here at evening and waited hours for their chance at the scales."



paid a bill of exchange in excess of the proceeds of the shipment, and frequently it was a difficult matter to get the account balanced again.

Now, almost every dealer owns his own elevator property, which has increased in value on account of the beneficial effects of organization and is, therefore, financially reliable for any just differences which may arise, and claims of that nature can be enforced and collected.

These meetings bring together the wide-awake and progressive dealers from all parts of the surplus producing state, and the receiver can see more of his customers and make more acquaintances of those who are possible customers in the three days we are here than he could in as many months of travel, to say nothing of the saving in expense.

Each receiver is benefited or injured by the reputation his market bears on the questions of inspection and weights. A firm may have an enviable reputation and be desirable to trade with in all respects and yet his market may be such that the shipper would hesitate to ship there on account of these objections. How much, then, enures to the benefit of the receivers to have the official weighmaster of a central market take so much interest in the question of weights that he would have published at a large personal expense and circulate gratuitously a treatise on that subject which points out the many ways that differences occur, and thus strive to educate the shipper to be more careful in order that these troubles might be averted. The confidence that was created among shippers by this act and the feeling of security that the weighing in that market was being carefully and honestly looked after has doubtless been the means of placing many cars in some one's hands to handle that might have been diverted to other markets. The agitation of this question at these meetings suggested that step, and how could these facts have been brought to the shipper's attention more practically or more forcibly? Who, then, can measure the amount of financial good the last meeting of this organization did for the receivers of that market? It is to the direct benefit of the receivers of every market to have such questions thoroughly discussed, and if any irregularities are discovered it is certainly to their interest to assist in having them speedily corrected.

We who were at Des Moines one year ago to-day will remember the pleasure we derived from the paper read by that remarkable man, who was, at that time, at the head of the cash grain trade of the world. It was with much sorrow that we read soon afterwards that he had been called from the activities of this life to that life in the great unknown. We deplore his untimely death. The sickle of time cut him down when his career was at its zenith, when he was about to witness the completion of one of the greatest achievements of his life. Frank H. Peavey is gone. His life work is over, but his example and precepts will remain for our guidance. We will remember his words and the slight contact we had with him will forever be a pleasant memory. The life and career of such a man will be an inspiration to many rising young men and will doubtless be an example which many will strive to emulate. Thus the life of this receiver will have shed an influence which will be reflected for years upon the trade in general.

This organization was designed and created to assist the trade in all of its branches. The receivers of our markets should all consider it a duty as well as a privilege to give it their heartiest support. They should belong to this Association and thus have an honorary membership in each of the various local or state organizations.

The receivers who are numbered among our members are among our most enthusiastic workers. I trust the time is near at hand when our roll of membership will include every reliable receiver, commission man or broker in each of our large central markets. If there are any such here who are not so enrolled, I hope that I may have said something to show you that there are good and sufficient reasons why you should give us your influence and support.

## CHICAGO INSPECTION AGAIN.

On December 6 a joint committee appointed by the Illinois Valley, Central Illinois (Springfield), Northern Illinois and the Bloomington-Peoria-Champaign divisions of the Illinois Grain Dealers' Association, met with Commissioners French and Neville of the Illinois Railroad and Warehouse Commission at their office in Chicago to discuss anew the matter of Chicago inspection of corn (more particularly) and oats.

There were present F. J. Delaney, Chicago and Geo. Beyer of De Pue, representing the Illinois Valley Association; H. T. Truby of Joliet, Wm. Hirschey, with E. W. Wagner of Chicago, and P. Whalen of Cabery, representing the Northern Illinois Association; L. Lackland of Chenoa and J. P. Wrenn of Washington, representing the Bloomington-Peoria-Champaign Association; V. P. Turner of Springfield, representing the Central Association; also Geo. A. Stibbens, secretary of the National Association; H. Knight of Monticello, president, H. C. Mowry of Forsyth, secretary, and A. W. Lloyd of Decatur, assistant secretary and traveling agent, of the Illinois Grain Dealers' Association; E. Churchill of Chenoa; J. A. Jamieson of Marseilles; M. Walsh of Campus; D. W. Burry of Chicago; President McDonald of the Northern Illinois Association; Chief Inspector Bidwell, Chief Deputy Smillie and others.

F. J. Delaney, with the Nash-Wright Company, had been made spokesman for the joint committee, and at about 10 o'clock presented the grain dealers' request, which, in a word, was that in the inspection of corn the department be a little more lenient in its interpretation of its rules than it has been. Mr. Delaney said:

By way of explanation of our appearance before you this morning it may be well to state as briefly as possible the reasons which called this convention into being and which caused our appearance before you.

The grain men of Illinois have long been dissatisfied with the conditions governing the inspection of grain here at Chicago. Their dissatisfaction has frequently been voiced in a disconnected sort of way, but such protests have heretofore proved unavailing. During the last year or two the grain men of Illinois as well as those of other states have been forming associations with the view of remedying what they think are abuses in the grain trade. The committee before you consists of from one to three men from every association in this state; and we come instructed to use every means to induce you to make the conditions governing the "in"-inspection of grain at Chicago less rigid. We are impelled to take this move not only because present conditions force us to become speculators, but also because the farming community with whom we are in intimate and close relationship daily is unanimous in complaint against present Chicago inspection.

We are not speculators and we have no sympathy for the professional manipulator in this or any other market. Neither are we in sympathy with the idea of lowering the present Chicago standard of inspection according to the printed rules formulated by your committee; but we do urge that you interpret these rules in a fair and reasonable manner. We are not here to condemn your system, nor are we here for any political effect, but we are here with an earnest prayer that you consider this question of inspection from all sides and all standpoints.

Inasmuch as we are all shippers of corn to this market we will for the moment consider the inspection of corn at Chicago.

No doubt you, gentlemen, are all familiar with the processes of trading in futures on the Chicago Board of Trade, and you all realize the necessity for this trading, and its dependence upon and relation to what is technically called "cash grain." You realize that unless a country grain man can sell for future delivery the corn which he buys from the farmer, he becomes a speculator. You realize also that it is to the interest of the producers of this grain that the local grain buyer be allowed, or even compelled, to do a safe mercantile business. We state unqualifiedly that the present conditions of inspection force us to become speculators. We are buying grain on unreasonably large margins, according to the theory of the farmer, and the farmer is in a measure correct. That these margins are large is true, but they are not unreasonably large, when we consider the chances that your inspection forces us to take.

In previous years the country grain man could sell for future delivery the corn which he bought from the farmer, could clean up this corn, send it to Chicago and by delivering it fill his contract here for future delivery. Under the present state of affairs this is impossible.

As tending to convince you of this fact we will read to you some figures taken from your own printed reports which are official and correct. We have here a tabulation of the inspection of corn at Chicago for the past fifteen years. As your report for 1902 is not yet from the press, no figures are avail-

able for this year; but we will consider the fifteen years from 1887 to 1901, inclusive:

TABLE SHOWING PERCENTAGE OF CONTRACT CORN IN CAR LOT ARRIVALS AT CHICAGO FOR 15 YEARS FROM 1887 TO 1901 INCLUSIVE.

YEAR	Car Lot Arrivals	Contract Corn	Percentage	Average for 3 Years
1902				
1901	84,376	7,683	9%	16%
1900	140,094	29,821	21%	
1899	151,270	29,014	19%	
1898	158,521	65,523	41%	53%
1897	165,692	99,898	60%	
1896	147,407	86,781	59%	
1895	103,260	61,490	60%	54%
1894	92,321	40,050	43%	
1893	127,792	65,992	59%	
1892	120,640	43,606	36%	42%
1891	118,389	53,119	45%	
1890	139,074	63,104	46%	
1889	143,028	72,343	51%	51%
1888	118,346	47,656	40%	
1887	84,279	53,049	63%	

From this tabulation we see that in the year 1901, 84,376 cars of corn arrived here and were inspected by your department. We see that 7,683 of these cars were graded No. 2 or better. A little computation will show you that this percentage of contract corn is only nine. In the same manner we learn that in 1900, 21 per cent of the corn coming to Chicago graded contract. In 1899, 19 per cent; in 1898, 41 per cent; in 1897, 60 per cent, and so on.

From these figures we also learn that for the three years 1899 to 1901 inclusive the average percentage of contract corn was 16.1-3; from 1896 to 1898 inclusive the average percentage was 53.1-3; from 1893 to 1895 inclusive the average percentage was 54; from 1890 to 1892 inclusive the average percentage was 42.1-3; from 1887 to 1889 inclusive the average percentage was 51.1-3. Therefore, gentlemen, when you consider that for years past the average percentage of contract corn in car lots coming into Chicago was in the neighborhood of 50 per cent of the arrivals, and for the past three years it has not been higher than 20 per cent and as low as 9 per cent, and we think the figures for 1902 will show as low as 5 per cent, you will very readily see that we are justified, and absolutely correct, when we claim, as we do claim, that the conditions governing the inspection of corn have grown more rigid in recent years than they were heretofore and that the situation is such that we are unable to sell for future delivery the corn which we buy from our farmer friends.

Bear in mind also, gentlemen, that while our interests in this matter are largely personal, we are not alone in our objection to this state of affairs. I venture the assertion, and I think it will be borne out by the grain men present, that there is not a day in the year that we are not severely criticized by the farmers for the present Chicago inspection. We resent this criticism because heretofore we have been powerless to remedy matters; and we come to you because of the conviction that when this matter is placed before you in the proper light, you will see the necessity of a reasonable inspection.

According to the rules issued by your department No. 2 corn "shall be \*\* corn dry and reasonably clean, but not good enough for No. 1." This is the rule, and this rule is satisfactory to us; but your interpretation of the rule is not.

We realize full well that the importance of a market depends almost absolutely on the integrity of the grades maintained, consequently we are unalterably opposed to any proposition looking toward a lowering of present grades, either on "in"-inspection or on "out"-inspection. We do not criticize the wording of any of your inspection rules, but we do criticize your interpretation of those rules; and we urge that when a rule says "reasonable" that you interpret the word "reasonable" in such a manner. While we are not familiar enough with the details of your department to advise you at this moment just exactly where the trouble lies, yet it appears to us that if your Commission were to make an effort to get the "in"-inspection a little closer to the "out"-inspection,—if necessary, make both a little more reasonable,—many of the complaints would be unfounded. We think that on line grade corn on "in"-inspection your track inspector should be instructed to give the grain the benefit of any doubt. The fact that not infrequently No. 3 corn sells for as much by sample as does the No. 2 should not influence your inspector in his decision as to the grade. Grain should be judged absolutely on its merits and in a reasonable manner.

We are not here to protest against a "corner," or the possibility of a "corner," because none of us are interested in such a possibility. Members of your Commission have advised us unofficially that they dislike "corners," as "corners" create dissatisfaction. If your Commission will see to it that corn, or other grain, is inspected on its arrival with care and fairness, we think there will be fewer "corners" and less criticism.

In asking you to be a little more reasonable on your "in"-inspection we are not asking you for anything more than is just. We are not prepared to argue that corn which is damp or largely unsound or dirty should grade No. 2; nor do we expect that new corn, or corn inspected during the germinating season that is liable to get out of condition in an elevator, should grade No. 2, but we say that corn that is "commercially" dry and reasonably clean should grade No. 2. We believe that when your rules say "dry" they mean commercially dry and not chemically dry. Chemically dry corn, as you know, cannot be handled; but commercially dry corn,—that is, corn with from 10 to 13 per cent of moisture,—is commercially dry corn and will not



get out of condition in an elevator under average weather and structural conditions.

We do not admit that the quality of the corn coming to this market is poorer now than it was in previous years. On the contrary, we assert that the corn coming to Chicago now is much better than it used to be. The Illinois State Agricultural Station informs us that the average quality of the corn crop now raised from year to year is vastly superior when considered purely as a vegetable food product to what it was two, three, five or ten years ago. We are confident that your own experience will convince you that this is true. Yet we find from your own figures that less and less of our corn grades No. 2 despite our efforts to make it grade.

It is not, however, our purpose to enter into a controversy as to what constitutes contract corn; but we do most respectfully request that you take some measure that will put your inspection on a fair basis.

Representing, as we do, the country grain men of the state of Illinois, we feel that we are entitled to consideration and relief at your hands. The gentlemen before you are conservative men, most of whom have been in the grain trade for years; and as they have been investing their own money in grain for years, they are presumed to know something about it. They come here, therefore, because they honestly believe that present conditions should be remedied; and that if they state their case to you, you as public officials will give them the hearing and the relief they deserve.

In conclusion, I will say that most of the gentlemen present have had much experience, which may perhaps be interesting to you. They are anxious that this shall be a friendly discussion of existing conditions and that you may have a talk with them along the lines indicated in this introduction. I will therefore retire and give the other members of this committee an opportunity to take part in the discussion. Gentlemen, I thank you.

Following the argument of Mr. Delaney, the Commissioners invited any who had suggestions to make to do so; and the result was a general discussion of the situation, which lasted until about 1 o'clock p. m.

Mr. Lackland of Chenoa, in support of the contention that the inspection was severely rigid, said that in July, during the corner, he shipped to Chicago 16 cars of carefully selected and cleaned corn, all of which graded poorer than No. 2. In September, after the corner, he shipped 25 cars, none of which was selected or cleaned corn, of which nine, or nearly 30 per cent, graded No. 2; in October, of 21 cars 43 per cent graded No. 2. On the other hand, his shipments to East St. Louis, where the inspection is controlled by the same departments, acting under the same rules, turned out better. Of 46 cars shipped in May and earlier, not selected corn, 21 graded No. 2. From July to November 24 he shipped 97 cars, of which 24 per cent graded No. 2, and of one lot of 16 cars, 13 graded No. 2.

The Commissioners suggested that July was a wet month; but it was contended that September was equally so.

Mr. Beyer of De Pue said that formerly 75 per cent of Bureau County's corn had graded No. 2 or better; but for the past two or three years dealers have had trouble about the grade; and yet the corn itself is at least just as good as it ever was. The grading is getting steadily worse, and in effect has made the country grain buyer a mere speculator.

Mr. Mowry said the idea Mr. Delaney advanced, reduced to its simplest form, is this: either the grading is getting to be more rigid or the corn is depreciating in quality. In his own experience he had found the grading had become more and more rigid. In 1890 every car he shipped graded No. 2; in the last few years it has not graded; and whereas in the past he felt that he was able to look at corn and tell how a car would grade, now he is unable to tell anything about it—it's all guess work; and yet in the shipping he takes now five times as much pains to clean his corn as he did ten years ago. In past years the public elevators frequently were required to post hot corn; now such a thing is practically unheard of.

Mr. Mowry called the Commissioners' attention to the fact that all through Illinois there is serious complaint of the inspection at Chicago, which is much more rigid than at other inspection points in Illinois. Grain dealers, however, have no fault to find with the rules; they ask for no change there—only for more leniency in their interpretation; that the corn sometimes he given the benefit of the doubt, for the decision on line corn is now always against the shipper. In consequence of

this rigidity, the country dealers are accused by the farmers of robbing them by taking too great a margin; and in retaliation they are building farmers' elevators to avoid trading with the regular dealers.

In reply to a question, Mr. Mowry said no allowance should be made by the inspectors for dirt in corn; but they should take into account the fact that commercially dry corn might be temporarily damp when inspected. That temporary moisture should not condemn the corn. Dry corn naturally contains 14 per cent of moisture, and the amount of moisture it might contain without being graded as too damp for No. 2 might go as high as 20 per cent. But the inspectors are cutting down this percentage; and the dampness corn may absorb temporarily from the atmosphere is counted as impregnating the kernel itself, when it does not.

The Commissioners asked if methods in the grain business had not changed of late years, which are making themselves felt practically in the inspection?

Mr. Mowry replied that it is true that methods are changing, but that these changes should count in favor of the shipper, and not against him.

Mr. Heydaecker suggested that the inspection now requires the shipper in effect to guarantee that the corn will remain dry indefinitely in the future, although it has in the meantime passed out of his control.

Mr. Mowry suggested that corn that will not grade No. 2 at Chicago because "too damp" goes to New England and is there accepted and handled without complaint of dampness.

Mr. Knight said he thought corn was being handled more carefully on the farm than it used to be; but during the July corner it seemed impossible to get corn graded No. 2 in spite of care in cleaning and selection. The trouble the country dealer is in arises from the fact that the farmer is dissatisfied because the dealer, under present grading conditions and his inability to hedge, is compelled to take too wide a margin to break even. A margin of  $1\frac{1}{2}$ c, he thought, is enough when grain is graded with reasonable leniency.

The chief clerk of the department, on request, reported that the department inspected in July 466 cars of No. 2 corn; in August, 90; arrivals in July, 7,051 cars; in August, 1,158 cars; percentages, in July, 6.6; in August, 7.5. This was to show that the grading was not easier after than before the corner.

Traveling Representative Lloyd then took up the old controversy about a relaxation of inspection after the break in the July corner; and Mr. John F. Howard, with Merrill & Lyon, substantiated his (Mr. Lloyd's) statement that there appeared to be a "let up" after the corner was broken; to this extent, at least, that he had had on his sample table No. 2 corn the day after the corner broke that was considered by him and others poorer than other corn which had been refused a No. 2 grade before the break.

The charge, apparently made by Mr. Lloyd, that the department had discriminated against No. 2 corn during the corner to aid the speculators, Mr. Lloyd declared was not made by him. He had no reason to doubt, and did not doubt, the integrity of the department or its employees; but it did seem as though the influences of the corner itself, perhaps, or something else, had had the effect of tightening the inspection, in addition to the habitual tendency not to give the grain the benefit of the doubt. He thought there ought to be a department school of instruction for tank inspectors.

Commissioner Neville said there was, in fact, such a school of instruction. No track inspector now is able to get his place without first passing an examination which is so severe that he felt warranted in saying that no dealer present could successfully undergo it; that no promotions are made except for merit, and that no changes in the working force have been made in the past six years.

Mr. Delaney, representing the joint committee, protested that the committee had no charges of any kind to make. It was appealing only for a less

rigid inspection, which is now of such a character that practically every month has its corner of No. 2 corn. Asked what percentage of moisture should be allowed in No. 2 corn, Mr. Delaney said only a chemist could say as to that, and the dealers do not expect the inspectors to measure it; but the trade does know that the inspectors are getting too particular about "dampness."

Mr. Churchill reminded the Commissioners that the dealers and the Commission are alike parts of the machinery that moves grain from the farmer to the consumer, and they as business men should work in harmony; but in practice the dealers have found that the Commission's inspection department has made it impossible to move Illinois corn to the consumer through Chicago. In consequence, every dealer who can do so now avoids Chicago and sends his grain to some other market. We ship, he said, to Baltimore and New York and have no trouble with the grading. It has, in fact, come to this: that the country dealers no longer get bids for No. 2 corn from Chicago, but only for "No. 3 or better."

Mr. Delaney suggested that this fact might have its influence on track inspectors who, knowing that no bids go out for No. 2 corn and that No. 3 brings a price nearly as good as No. 2, assuming that "it makes no difference anyway," make it No. 3.

Mr. Lackland reminded the Commissioners that the committee represented 700 dissatisfied country dealers who are deliberately sending their shipments away from Chicago as much as it is possible to do so. The committee is speaking in behalf of the grain that Chicago ought to get but does not. We have no difficulty, he said, in selling our corn elsewhere, but we can no longer hedge our purchases as we used to do because your inspection no longer allows us to sell what in fact we buy. You are, in fact, reducing us to the level of mere speculators.

Commissioner Neville said the Commission desired to keep the trade in Chicago and also to grade the corn so that it would keep when in store in Chicago elevators. This is the problem before the Commission.

At this point the discussion turned aside to take a shy at Standard Oats, which only the elevators seem able to sell, although none are bought or received by them. Indeed, from the brief discussion it appeared that, while the dealers are pleased at having the new grade, which promised to enable them to sell the oats they actually buy, yet when their country purchases are graded, they are graded as white oats and not as standard; so that it has now become as difficult for a country dealer to hedge contract oats as it is to hedge contract corn.

Commissioner French said the Commission never favored the "Standard Oats" grade, and had made it only in deference to a unanimous demand for it.

Mr. Delaney said there is no objection on the part of the country trade to the "Standard" grade, but there is great objection to the interpretation of the rule by the track inspectors. For, while the grade covers perhaps 70 to 90 per cent of the oats actually handled in the country, the dealers there are not apt to get their shipments so graded. The grading of oats is as badly off as that of corn.

Mr. Churchill and Mr. Whalen both made the same kind of statement as to oats.

The discussion then turned on the part the bankers play in the matter. The country banker, it was shown, would not make advances on any unhedged grain, and the grading prevents the country dealer from hedging when he wants to borrow. On the other hand, Commissioner French suggested that the city banker would make advances only on warehouse certificates for contract grain; and these certificates the department wants to protect.

It was suggested that a little more rigidity to make the in and the out inspection more uniform and nearer an equality as to the grain might help in the way of finding a solution of the problem.

After further informal discussion the Commissioners announced that they would try to satisfy the country shippers. "We stand," said Mr. French, "between the shipper and the purchaser. There has been an evolution in the grain business in the



past few years, and much of the trouble is due to this. Our aim is to preserve the integrity of the grain certificates and warehouse receipts and at the same time treat both sides fairly."

## COURT DECISIONS

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, LL. B., of the Chicago Bar.]

### Capacity Not Test of Liability of Warehouseman.

The capacity of a warehouseman, the Supreme Court of Colorado says (Denver & Rio Grande Railroad Company vs. Peterson, 69 Pacific Reporter, 578), is not a true test of his ability. The care required of a warehouseman is the same whether he be rich or poor. For if the fact that he is rich requires of him greater care than if he possessed only moderate means, or is poor, then, if he were extremely poor, the care required might be such as practically to amount to nothing; and no one would claim that such an uncertain and sliding rule should be the measure of his liability.

### Risk of Injury from Voluntary Act Assumed by Customer at Elevator.

The trial of an action to recover damages for personal injuries received by a party in an elevator dump while he was delivering oats at the elevator, in consequence, as alleged, of the defective condition of the dog, or operating attachment of the dump, resulted in a judgment for \$1,092 in his favor. But this has been reversed by the Appellate Court of Illinois, third district (Brownback vs. Thomas, 101 Illinois Appellate Court Reports, 81). The court say that the party drove upon the dump with his wagon loaded with oats, and in attempting to manipulate, or operate it, the dog, or holding attachment, suddenly slipped from its hold and caught him between the dump and wagon and hurt him.

The negligence charged was defective attachment of the dump, about which there was conflict of evidence. The chief contention was, however, whether it was the duty of the party injured to operate the dump at all; and it was insisted that his attempting to do so was a mere voluntary act, for injury in which he could not recover.

The weight of the evidence, as the court views it, was that he was instructed to drive upon the dump and wait there until one of the parties sued would operate it, and had he done this no injury would have happened to him. It was not in the plan of the parties sued that customers should operate the dump; and in the voluntary effort to do this, the person so acting must assume the risk of injury. The parties sued could not be expected to foresee an injury following from an act they had not invited.

### Including Commissions of Unlicensed Brokers in Note.

A party who had engaged a firm of brokers to execute orders for the purchase and sale of grain on the Chicago Board of Trade gave his notes to the individual partners for something over \$3,200 which he became indebted for losses on purchases and sales of grain and commissions charged by the brokers for conducting the transactions. Notes for one-half of the amount he paid and about \$120 to each of the partners on one of the other two notes he held. Subsequently the party died and his executor contested payment of the balance.

The ground for the contest was the inclusion in the total amount, in the accounting, of \$31.25 for commissions in a month when the firm transacted the business of commission merchants and brokers in grain on the Board of Trade in violation of a city ordinance requiring that they should procure a license authorizing them to transact such business.

The Supreme Court of Illinois holds (Donthart vs. Congdon, 64 Northeastern Reporter, 348) that

this constituted a good defense. It says that the particular transaction for which the sum of \$31.25 was charged and included in these notes was an unlawful act and subjected the brokers to punishment by way of a fine. It was illegal, and entered into and formed a part of the consideration for the promise contained in each of the notes. The rule has long been established that if any part of an entire consideration for a promise, or any part of an entire promise, be illegal, the whole contract is void. A partial want, or a partial failure, of consideration avoids a note, only *pro tanto*, or to that extent, but illegality in a part of the consideration upon which the promise contained in the note is founded avoids the entire promise and renders the entire note uncollectible.

### Not Entitled to Hay.

The case of Robinson vs. Thoma (70 Pacific Reporter, 240) was one brought to recover a quantity of hay or the value thereof. It was alleged that on June 20 the hay, estimated by both parties to be 100 tons, was purchased at the agreed price of \$5.50 per ton, and that in pursuance of the agreement then made \$10 was paid on account and a writing of which the following is a copy, given:

"Received from W. W. Robinson (\$10) ten dollars on acct. of 100 tons hay, more or less, at \$5.50. Hay to be moved by the last of July. I agree to haul said hay to steamboat landing."

But the purchaser made no demand and caused no boat or other means of conveyance to call at the landing for the hay within the said time and made no demand that the balance of it be placed upon the landing, although it was admitted that a steamboat went to the landing and that an attempt was made to load hay thereon, which had been stored in a warehouse on the landing, although, it was averred, this occurred about the 7th or 8th of August, and not on or prior to the last of July. Nor did the purchaser pay or tender payment, within the time he was to remove the hay by the contract.

Until these conditions precedent were performed, he was not entitled, the Supreme Court of Washington holds, to possession; and in the absence of their performance, the other party had the right to stand upon the time provision in the contract and refuse to deliver possession. The purchaser said that he deposited the amount in a bank to the credit of the other party, but the court declares that it could not be urged that that was a tender in law. Wherefore the court holds that there was no question for the consideration of the jury and that the action of the trial judge in instructing them to return a verdict for the seller was right.

### Payment of Labor Claims and Conversion of Wheat.

In an action by a bank against an elevator company—wherein the bank as holder of a mortgage sought to recover damages for an alleged conversion of a quantity of wheat delivered to the elevator company by the mortgagor, and in which the defense interposed was that the elevator company paid for the wheat in controversy by paying certain debts due from the mortgagor to farm laborers, which payments, it claimed, were made under the alleged authority of a person who during three years just prior to the year in which the wheat was delivered concededly was the bank's agent—the Supreme Court of North Dakota holds that there was no error in instructing the jury that any custom of paying labor claims existing between the parties in prior years would not justify the payment in question.

Furthermore, it says (First National Bank of Fargo vs. Minneapolis and Northern Elevator Company, 91 Northwestern Reporter, 436) that if it were conceded that a usage or custom could exist, as to the payment of labor claims by parties operating elevators, which would bind persons having case, there being an entire absence of evidence as to the existence of any such usage or custom where the elevator was or elsewhere, and no evidence that the payments in question, or any prior ones, were made in reliance upon a local usage or custom,

A custom or usage which is merely local must be proved as any other fact. Courts will not take judicial notice of it, nor can its existence be left, without proof by witnesses, to the private information of jurors. If the elevator company in some instances, in prior years, without express directions, paid labor claims and its acts were ratified by the bank or its agent, this fact in itself would not authorize it to pay such claims in the future at its own volition and without direction. Payments so made, not having been authorized, would not bind the bank unless ratified.

As to the time of the alleged conversion. The court says that the elevator company was rightfully in possession of the grain. Its obligations were fixed by the statute; and the fact that it may have mixed the grain with other grain, or that it may have shipped it out, if such was the fact, did not constitute a conversion. Under the law it could fully comply with its obligations to the owner or person entitled to possession by delivering to such person an equal quantity of wheat of like grade; and only upon a demand by the person entitled to possession, and a refusal on its part, would it be liable for a conversion.

Nor could it be said that the conversion occurred when certain letters were written, each of which contained a demand; but each also called for a reply, and the company neither complied with nor expressly refused any of the several demands, the reply of the general manager indicating that the matter was being investigated. The elevator company, being in rightful possession of the grain, had a right to a reasonable time in which to investigate the bank's claim before it could be compelled to surrender the grain or refuse to do so.

## STATE AND NATIONAL ARBITRATION.

[A paper by Jay A. King of Nevada, Ia., read at the annual meeting of the Grain Dealers' National Association at Peoria, Ill., on October 2, 1902.]

Arbitration as a means of settling differences in the grain trade is an important subject for our consideration. Having given my views heretofore regarding this question and others having discussed it quite fully and more ably than I can expect to do, there is but little probability that I will present anything new at this time. I trust, however, that a discussion of the subject may result profitably, although what is now said may be in some sense a repetition.

The volume of business in cereals in this country is enormous. Hundreds of millions of bushels are handled by the grain merchants each year, and the values represented by the transactions amount to fabulous sums. All of the business is done on a strictly cash basis. The man who engages in the business of buying and selling grain, whether he be the small country dealer who receives and ships a few car loads only each year, or the receiver of large quantities at a terminal market, must always be prepared to pay spot cash as soon as the grain is delivered. Inability to pay for grain immediately on delivery is as much to the discredit of a grain merchant as a failure to pay deposits on demand is to a bank. The immense volume of the business done, the large amounts of money represented in the transactions and the promptness of payment required, make the business of dealing in grain one of the most important branches of trade in this country. To be an honorable factor, though in a small way, in a business of such importance and of so much concern to the country, is an enviable position to occupy.

Owing to the constant changes and often times wide fluctuations in market values, the successful conduct of the business requires prompt and decisive action. Most of the sales of these commodities are made by wire. The contracts are necessarily brief, specifying only the kind of grain, price and time of delivery. In no other business is property transferred in so large value under agreements with so little detail.

There are many differences and disputes between men in the grain trade, yet the differences are few



when compared with the large number of transactions entered into and concluded without dispute. While the contentions are few by comparison, they occur in greater number than they should, and the reduction and modification of them is a considerable part of the work to be accomplished by associations, and is one of the principal objects of organization.

When disagreements occur and the interested parties themselves cannot arrive at an amicable adjustment of the difficulty, there are three ways of settling the dispute, to-wit, by resorting to force and endeavoring to obtain satisfaction through injury or oppression; by appealing to the courts; or by referring the question of difference to disinterested persons for their conclusion. The first named method is so far beneath the dignity of men engaged in the grain trade—men who are all amicable and so strictly observe the scriptural injunction, "Love thy neighbor as thyself," that it should not be considered in this connection. We have, then, two remedies to choose between: take the case into court, or submit it for arbitration.

In primeval times, force and power were the only recognized arbiters. As civilization advanced, the inclination increased to settle disputes without resorting to force. Later, courts were established where disputants could refer their differences for settlement; and in the more enlightened countries, courts of justice are held in high honor and looked upon with deference and great respect where it is presumed exact justice is rendered.

I do not intend to speak disparagingly of the courts, or to be understood as lacking in respect for them. A high regard for the justness of their decisions adds largely to the stability of the nation. But we must admit that in suits brought to enforce the collection of money, the successful litigant is always a loser to some extent, often largely so; and many of us are well aware that not infrequently a meritorious case is lost by reason of the lawyer not having sufficient comprehension of it to get it clearly before the court. A case at law, in which the rights of the parties are largely dependent on customs and usages incident to a particular class of business, is difficult to obtain a clear understanding of by those who have had no previous knowledge of or experience in such matters.

Nearly all the differences that would be proper questions for arbitration occur between the purchaser and the seller. The majority of the sales are made to non-resident purchasers. The buyer and the seller usually reside in different states. The jurisdiction of a state court not only does not extend beyond the state but usually not beyond the limit of the county wherein it is located; consequently a person having a claim of account against another must go to the country where the person the claim is against resides, if he would avail himself of the benefits of the court to collect his claim. That he cannot well afford to do in the amount of his claim is not large; and if the claim is large the expense is large also. In most instances the amount of difference on a grain transaction is small. The result is that many times no effort is made to collect the difference claimed, each party to the transaction still believing he is right, and so believing, each thinks less favorably of the other as time passes until each arrives at the conclusion that the other is too dishonorable to be safe to transact business with; and they become too far separated in opinion to have any further transactions with each other. Such method and result must be considered neither desirable nor profitable.

If suit is brought on account for the difference claimed on a grain transaction, the case is seldom carried beyond the judgment of the lower court; partly for the reason that the amount in controversy is in most cases not large enough to warrant the trouble and expense of an appeal to a higher court. In the lower courts, results vary in similar cases, not only in different states but in different districts of the same state. The result in the lower courts are so widely different that the trial of many cases therein does not establish precedents or make

a fixed interpretation of the law. A comparison of the results in such trials would leave the enquirer entirely at a loss to know what to expect, as a result of his case, should he desire to bring suit to enforce his claim. That would be so for the further reason that the opinions of the higher courts only are regarded as authority for precedent and to fix the rights of parties. From which it can be understood readily that the enforcement in the lower courts of claims for differences would not determine the standing of parties to a subsequent case. These are some of the reasons why a resort to the courts to obtain settlements of differences in transactions relating to the purchase and sale of grain is not the most desirable relief.

As the situation now is, there are customs in the grain trade that are supposed to be established but the trouble in respect to them is that they are not fixed; are not understood alike. Some understand them in one way and others in another way; and for that reason, if for no other, cause difficulty. Misunderstandings are the chief source of most of the differences. In most cases of dispute, the contention is not so much because of a desire on the part of one to obtain an advantage over the other as because the contention is interpreted differently.

It is entirely impracticable to specify in detail, in each contract for the purchase and sale of grain all the particulars of the transaction. To avoid delay and unnecessary expense and for the purpose of conducting the business with the promptness absolutely required, a considerable part of the contract must be understood—inferred—unwritten. The unwritten part of the contract may be fixed by custom or usage. The courts recognize customs or usages, when they are well established; but to receive such recognition, they must be general, positive and uniform. Appellate courts have held that, "A known usage of trade forms a part of a contract made in that trade." But they have held further that, "A usage to affect a contract must be so general and well established that knowledge and adoption of it may be presumed, and it must be certain and uniform"; also that, "A custom or usage, to be available against a party to a contract, must be so notorious as to affect him with knowledge of it . . . or he must be shown to have actual knowledge of it."

In a recent public discussion of the subject of arbitration the statement was made that, "Compromise is a synonym for arbitrate, and for that reason arbitration is objectionable." I desire to have it understood that what I may say has no reference to such arbitration as would result in a compromise of the case. I hesitate to believe that any dealer in grain wants to compromise with a creditor and settle for less than he justly owes, while continuing in the grain business. The principal purpose of arbitration with us, as I understand it, is, in case a financial dispute occurs between two dealers, to ascertain the amount justly due from one to the other. The method of arbitration under discussion and now in operation in some associations does not contemplate settlements by a division of the difference, by taking from one and giving to the other such amount as may seem necessary to preserve harmony with the one given to and cause him to be good natured because he receives more than rightfully belongs to him. Some may have supposed that would be the plan of settling differences, and for that reason have refused to consent to the submission of their trouble to be arbitrated. One of the parties in each of a few cases refused to arbitrate, giving as a reason for such refusal that there was nothing to arbitrate. The very fact that one claims any amount of another and the amount so claimed is not admitted, constitutes it a proper case for arbitration.

It seems reasonable to presume that an arbitration committee composed of fair-minded men, experienced in the business of handling grain, acquainted with the customs of the trade, having a thorough knowledge of what is meant by the terms used in contracts, will be better qualified to determine what will be a correct settlement of differ-

ences that have grown out of a transaction in grain than would be possible by those who have no knowledge whatever of the business. In a case before the committee, all the evidence that either party deems material may be submitted as fully as could be done in a case in equity in court. The members of the committee would be fully competent to decide as to the material value of the testimony offered. The expense of having the case decided by the committee is merely nominal. No time need be wasted in attending the hearing of the case, because there could be no technical advantage taken by a lawyer on either side. After a careful consideration of the testimony offered and the application of the established rules or customs of the trade, the commerce, unrestrained by legal technicalities and unhampered by want of knowledge of the subject matter, would more probably arrive at a conclusion just and equitable to all interested parties than could possibly be expected by a jury having no previous knowledge of or experience in similar transactions. It seems reasonable to presume that a system of arbitration, properly arranged and carefully conducted, with due respect to the rights of all, will be the most effective means of lessening the differences between dealers in grain transactions.

I believe that when arbitration of matters pertaining to the grain trade has been given a trial—has been in operation a sufficient time for its results to be understood, all who have differences will prefer to have them determined in that way rather than to apply to the courts for relief; and instead of a considerable number of claims being allowed to drag along as now, the differences will be settled and the parties to them will continue business relations.

I also believe that an effective and consistent plan of arbitration will be more far reaching and beneficial to the trade than simply the adjustment of the differences submitted to the committee. As has been stated, usages or customs, to be effective, must be fixed and uniform. The principal features of all contracts for the purchase and sale of grain are quite similar, varying somewhat, of course, in minor details. Being so largely alike in their general character, rules might be agreed upon which would constitute the basis of such contracts. If trade rules are adopted and they, together with what are regarded as customs of the trade, are interpreted by the arbitration committees and by them decided how they shall apply to and what effect they shall have on transactions, customs of the trade would become established and made clear, as could not be so well done in any other way. All members of the National Association, as well as the members of the several state associations, could be informed by the secretary of their respective associations of the decisions in the cases submitted, of what customs are in force, of the rules adopted and of the interpretations of them by the committee. All association members could then have a reasonably clear understanding of the meaning of contracts and of their rights under them, and could in most cases know what to expect from a decision by the committee. Trade rules and customs having become established and their meaning defined, the result would be less friction, fewer disputes and much less trouble.

Arbitration to be productive of the most good should be made compulsory.

The Illinois Stockmen and Corn Growers' annual convention will be held at the University of Illinois, Urbana, January 19 to 31. Four sections of corn and stock judging are arranged for every day.

The Washburn-Crosby Milling Company of Minneapolis has bonded its Humboldt mill to grind Canadian wheat only. The flour will all be exported. A bond of \$50,000 was also given on November 20 by the Great Eastern Elevator Company of Minneapolis for the storage in elevator H, Minneapolis, of Canadian oats. This grain eventually will be ground into oatmeal in this State in some mill yet to be designated, and used entirely for export business.





PUBLISHED ON THE FIFTEENTH OF EACH MONTH BY

## MITCHELL BROS. COMPANY

(INCORPORATED.)

OFFICE:

Manhattan Building, 315 Dearborn Street,  
CHICAGO, ILL.

HARLEY B. MITCHELL.....Editor  
A. J. MITCHELL.....Business Manager

Subscription Price, / / / \$1.00 per Year  
English and Foreign Subscription, / 1.60 " "

### ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

### CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., DECEMBER 15, 1902.

Official Paper of the Illinois Grain Dealers' Association.

### CROP REPORT ENQUIRY.

It seems to be a horse on the Census Bureau, the general credibility of whose work has been sharply called in question by the report of the special committee appointed to examine into the methods of this Bureau and the statistical division of the Agricultural Department, a synopsis of which is given on another page. The showing that of 1,490 counties of 20 leading agricultural states, there are 101 counties to which the Census Bureau gives a total area of farm lands equal to or in excess of their entire surveyed surface, leaving no room for towns, rights of way, roads, etc., is of course preposterous, and no explanations by the Bureau can make it anything else. The committee's disclosure of errors in the tabulation of returns also casts suspicion on the Bureau's reports. There is, therefore, a well founded belief that the Bureau has queered its agricultural reports by concessions to the present national tendency to ultra-exuberance.

While, however, the committee's report convicts the Census Bureau and throws its bouquets at Statistician Hyde, it does not wholly meet the exigencies of the situation. It recommends, it is true, the appointment of a few more field agents by the Agricultural Department and that the Census Bureau, being now a permanent bureau, should take an agricultural census every five years instead of ten; but it does not throw any real light on how the defects of the present system may be corrected. The vital weakness of the present system is the fact that its figures are only estimates, made by persons whose interest it is to underestimate, although the farmers themselves have always accused the statistician of overestimation. The figures, then, are in no sense statistics, and have only a comparative and no absolute value; and

as the original basis of the comparison—the census reports of acreage corrected decennially—now proves to be no basis at all, what value can the figures have even as comparative estimates?

What the trade wants is something that has the character of statistics, collected and compiled by disinterested and competent agents. The committee's report does not, unfortunately, tell the country how such statistics may be obtained by the trade.

### CHICAGO INSPECTION AGAIN.

The meeting of Illinois grain dealers with the Railroad and Warehouse Commissioners, reported on a previous page, seems to have reduced the problem of corn inspection to one of permissible moisture. What is "reasonably dry" corn was the question that did not receive an answer; except this, that the country shippers believe, and the inspection office records digested by Mr. Delany seem to justify the belief, that the department is steadily insisting that No. 2 corn at Chicago shall be more and more (un)"reasonably dry."

The daily press reports to the contrary, the joint committee made no changes. Its spokesmen asked only for a more liberal interpretation of existing rules. The committee did not assume to dictate how much moisture No. 2 corn should be permitted to carry, mechanically or chemically. The committee argued only that corn that is dry enough to be safely handled by the consumer, dry enough to be warehoused and to be exported, dry enough to inspect out as No. 2, ought to be good enough, barring dirt, to inspect in as No. 2 corn. But it is not good enough—at Chicago; although large quantities of such corn so grades at other markets, where it is handled for both domestic and foreign consumption.

The committee agreed that the tightening of the inspection is not premeditated. The effect, however, is obvious. Aside from turning corn away from Chicago, it takes the control of the supply of No. 2 corn away from the grower and shipper, where naturally it belongs, and turns it over to the elevator man, who neither bids for it nor buys it, but who nevertheless is able to deliver it from his elevator in any quantity the market will pay for.

Commissioner French seemed inclined to wash the commission's hands of the business by asking, "Has there not been an evolution in the grain business?" There has; but under the present system of inspection this evolution benefits only the owner of the "hospital." For although the country elevator man, too, has evolved, has better corn hauled to him from the farm than he ever had and he himself handles it much more carefully than ever before, nevertheless he is actually penalized for this care, the usufruct of which goes somehow to the terminal elevator only.

Is it any wonder the country buyer is getting dissatisfied and impatient with Chicago's methods, whose practical results are to furnish the terminal elevator men with unlimited raw material for making No. 2 corn and likewise to compel the country shipper to guarantee the quality of grain delivered from the "public" elevator six months hence, in order that the city banker's loans on warehouse certificates may be

protected beyond question? Mr. French's evolution is too lopsided to be defended. Atavism were preferable. Under old conditions, as the country buyer thinks, the latter had a better chance, at least than he has had for several years last passed.

### FIGHT FOR STATE WEIGHERS.

In the struggle of the St. Louis Merchants' Exchange with the Illinois Warehouse Commission for the control of the weighing system at East St. Louis the Commission has apparently won the first "round." By a drastic exercise of power, as a punishment for refusal to admit state appointees to weigh the grain therein, the Commission has ordered that no grain shall be inspected out of the Southern (McReynolds) and Belt (Williams) elevators at East St. Louis so long as such refusal is persisted in. The order issued on December 3 tied up 4,000,000 bushels of grain.

This act, somewhat arbitrary in character, is not encouraging to East St. Louis—it is even menacing if it is to be construed to mean that the Commission is about to go further (as it is hinted it is) and renew its attempt to break into the elevators at Chicago. It is true good lawyers are of opinion that the law under which the Commission derived the power it exercised at East St. Louis is not constitutional; but the courts in Illinois have not yet passed upon it. Any attempt, however, to attack the present Chicago weighing system would most certainly meet with a vigorous opposition, both in Chicago and throughout the state, where the Commission has no excess of popularity to rely upon.

### TEAM TRACK WEIGHTS.

That snappy grain dealers' association, the Illinois Valley, has begun a movement to reform the system of weighing grain on the team track scales of western roads at Chicago; or, rather to substitute system for the chaos now seen in the yards. The scales are, it is true, under the control of the Western Weighing Association, which represents the railroads, and the roads have a man on the yards; but practically the supervision of weights is nominal only.

Teamsters may take loads from almost any car they choose; they may spill any percent of the grain on the ground while loading their wagons; and may or may not report correctly as to cars unloaded, and to dodge the scales entirely might not be impossible. In short, the absence of system, with the premium it puts on dishonesty, is a reproach to the roads as well as to the city. One important grain shipper reports his average shrinkage at Chicago elevators as about 150 lbs. per car; at the team track scales, about 800 lbs. per car. This is a fair statement of the usual losses by shippers at these scales.

The Illinois Valley Association hopes to see the Board of Trade Weighing Department in charge of these scales, believing that Mr. Foss, as chief, would be able to bring order out of the present disorder; and the Association has appealed to the western roads and to the Board of Trade to so act as to effect such reform.



This request is a proper one. No one can make even the most casual examination of the situation without seeing the need of reform, if country shippers are to have any protection whatever when they are so unfortunate as to have their grain turned over to buyers who unload at the team tracks.

### RECONSIGNED GRAIN.

When does the grain shipper's responsibility for condition cease? Obviously with delivery and surrender of possession. But evidently there is a difference of opinion as to when a delivery of grain is made, or else receivers are gradually through sufferance acquiring extra-rights to which they are not legally entitled.

For example, certain protests have been recently referred to Secretary Smiley by Kansas shippers against the practice on the Kansas City Board of Trade of permitting the buyer of grain on track by sample to change the consignee-elevator after purchase, and on the grain's arrival, several days later, at the new consignee-elevator to call for a reinspection. As always happens in such case, the grade is lowered; whereupon the buyer ignores his original purchase to the extent that he throws the grain on the market, and it being bought at a discount, the luckless shipper is held up for the difference.

The unfairness of this practice is obvious. Certainly the original shipper should be assumed to have made delivery when the buyer so far takes possession as to order a change of the consignee-elevator. If thereafter there is delay and the grain goes out of condition, it is only business, as well as equity, as Mr. Smiley suggests to Secretary Bigelow of the Kansas City Board, that the railways and not the shipper should be held responsible for such loss of condition. And this would seem to be as good law as it is good sense.

### CANADIAN GRAIN ACT AND THE CAR FAMINE.

After much complaint of discrimination against themselves and a "royal commission inquiry," the farmers of the Canadian Northwest secured the enactment of the present "grain act," which among other things guarantees to the loading platforms their proportionate share of grain cars. The farmers were entirely satisfied—until it became necessary to interpret the law.

The law provides that cars shall be furnished by the railways "without discrimination between elevators, flat warehouses, loading platforms or otherwise." The railways have interpreted the law literally; so that in a town where there are, as at Indian Head, say, eight elevators, each elevator and the loading platform gets a car in turn. But there may be fifty farmers waiting to load at the platform. Of every nine cars set out at Indian Head, the platform, therefore, gets one, and each of the fifty farmers has to wait his turn from one-ninth of the cars.

Naturally, the man who is No. 40 or No. 50 on the farmers' list complains that this arrangement is unfair. But suppose it were the other way—that after the eight elevators had each received a car in turn, the railways should be

required to deliver fifty cars at the platform before any others went to the eight elevators; it would not be long before the entire railway system would be practically tied up, handling farmers' stuff loaded at the rate of not to exceed one car per day per station. Indeed, it is certain that even the present system of rotation has lessened the hauling capacity of the roads.

The fact is, the loading platform system is a failure. Its use this season, as hitherto, has demonstrated that what the farmer may gain directly by shipping his own grain, he loses indirectly by the depression of price caused by his own congestion of the railways, not to mention the losses his system inflicts on others. The farmer must try some other tack. If he thinks the elevator man has injured him, he might retaliate by going into the elevator business, as he has a right to do; but he should not be permitted to injure others by blocking the movement of a great crop by interfering with the machinery of its transportation.

### BUYING CORN BY CENTAL.

The Eastern branch of the Indiana Grain Dealers' Association, at a meeting at Anderson on November 15, decided to hereafter buy corn by the hundredweight instead of by the bushel. The association having so ordered, it would seem, perhaps, a work of supererogation to offer objection; but there are several valid objections to the cental system.

In the first place, outside of California (where it is now objected to seriously), it is a unit unknown to the trade in any part of the world or to the farming community; and for farmers to estimate the value of their grain in centals, when all market quotations are by bushel, is as perplexing and annoying as for Americans to count their money in pounds, shillings and pence. Complications of units are always objectionable in trade, whose barriers, natural and artificial, should be cleared away as far and as rapidly as possible.

Grain buyers should not interpret the "beefing" of grouchy farmers about a 70-pound bushel of new corn to be a bona fide "misunderstanding" of a custom of the trade as to new corn as old as systematic grain buying. The grain buyer is likely to have much more difficulty in explaining how he figures the price by the cental system, which is a cumbersome expedient even to get around the Indiana 68-pound-bushel law.

And then, but by no means less important, is the fact that more money can be made buying, say, 7,000 pounds of corn as 100 bushels than as 70 centals; for obviously in the course of a short time the margin obtainable will be no more on the cental than is now obtained on the bushel. Charity should begin at home, and at least should not take the form of a chase after a fad.

The grand master of the National Grange at Lansing advised the farmer "never to lose control of his property until it is needed for consumption." This is so indefinite as to mean nothing. Undoubtedly the farmer would do well to own his own granaries and storehouses and so be able to sell his grain, etc., only when it seems best to do so rather than to dump it

on the market immediately after harvest. But the farmer who holds his grain is a bull; and though we may like to see the bull's "tribe increase," it is a painful truth understood in grain circles that in the long run the bear most often gets the pot.

### RESPONSIBILITY ON REBILLING.

While there is some friction between shippers and receivers on the question of responsibility for the condition of rebilled grain in the middle states and New England trade, it is apparent from the correspondence in reference to the subject published on another page that these differences may be readily avoided by ordinary care on the part of the original shipper.

Every man in business is trying to get all that he can. "Business is business"; and because a man insists on his rights, even though these may in part be technical, he need not necessarily be accused of dishonesty or even of sharp practice. The shipper must stipulate in his contract to just what point his grain will be shipped, and there, of course, his responsibility would cease. If, however, he leaves his contract open to the interpretation that he guarantees condition anywhere, he will probably be called on to make good such a contract. Bearing this duty of definiteness in mind, there should be no trouble in dealing amicably with track buyers who rebill eastward or in any direction.

### UNIFORM INSPECTION.

The official proceedings of the Chief Grain Inspectors' National Association have been published, together with the "Rules for grading grain" adopted by the Association at the Peoria convention. Copies of these rules have, of course, been sent to all bodies controlling inspection departments, with the request that they be adopted for the common use of all markets in a general way, but not to supersede such other rules as local conditions may require.

The record of the Association's accomplishments in the past fifteen months is the best evidence that uniformity of phraseology in the grading rules is not only desirable but is hastening to a consummation. Feeling that uniformity is inevitable, the chief inspectors and others interested in their work believe that the inspection of grain can be more easily kept under the control of the exchanges if uniformity is brought about by themselves rather than forced upon them by the general government. Should the latter inspection obtain, local conditions would likely suffer in the interest of uniformity, whereas uniformity now would simply supplement for general purposes the local rules. Inspection under local control would continue to conserve local conditions; whereas under federal control the tendency toward general uniformity might be disastrous to those local conditions which in so many markets are of vital importance.

It is believed, therefore, that the speedy adoption of these rules by the exchanges would be of much benefit to the trade and assist materially in keeping inspection within the direct control of the trade itself, where it naturally belongs.



## EDITORIAL MENTION

Dedication of the new Minneapolis Chamber of Commerce on January 1.

"Blind pools are dangerous," says King's Boy Solomon. Has he asked Cleage about that?

Don't neglect the Indiana Association's annual meeting at Indianapolis on January 8 and 9, 1903.

To those who are still wrestling with the shortage problem, the letter by Suffern, Hunt & Co., found among the communicated articles, will be interesting.

Secretary Wells's bulletins continue to note that certain firms in Iowa still refuse to arbitrate. They are getting to be less numerous, however, it is pleasant to note.

Of course it is different, you know, but it certainly doesn't look different, when the Board permits its members to trade in privileges in Milwaukee and forbids it anywhere in Chicago.

Law makers do not always consult the interests of the grain trade in presenting bills before state legislatures. These bodies should receive attention of grain men while they are in session.

Noting a fall of stocks on bad bank statement, the Pope & Eckhardt Company punster says: "New York continues to be what Rip Van Winkle so pathetically called 'The Village of Falling Water.'"

The wooden terminal elevator is going. Its exit is most rapid where it comes in competition with the steel house. The latter gets the grain because the owner can't afford to insure it when stored in wood.

Wooden houses are naturally better storage receptacles for grain than steel; but the higher insurance rates on the latter houses offset many advantages of wood, especially when "reasonably dry" means dry enough to keep in any kind of a bin for any length of time.

If the National Hay Association's hay inspection is worth anything to the trade, and who doubts it, hay shippers and receivers alike should be more general in their support of the National Hay Association which alone makes this system of inspection possible. When membership in that association costs but \$2 a year, an apology is due from a hay man who is not a member.

Even if growers and grain buyers can't produce or ship corn good enough to go into Chicago as No. 2, the world need not worry about a shortage of that particular commodity so long as the private elevators can inspect it out at the rate of 50,000 to 75,000 bushels a day. In fact, nearly all the private houses are now "making" contract corn very rapidly at a good profit. The same is true at St. Louis, whose elevator men

are "catching on" very rapidly, and where the elevator men are said to be the chief shorts to the Cleage blind pool.

Mexico has reduced the duty on wheat from 30c to 15c per bushel; but as Mexico is a corn-eating country rather than a wheat or flour consumer, the remission of the duty doesn't cut much figure in the American market.

The Regina Grain Growers' Association has adopted resolutions advocating "pressure" upon the railway people in order to secure the same freight rates by rail in winter that are made by the water routes in summer. These Canucks will be giving the German agrarians pointers next.

Illinois seems to be again the banner corn state of the Union, with an estimated 380,000,000 bushels. And old farmers and grain dealers say, too, it is one of the best crops in quality the state ever raised. Q. E. D.: But how much of it will the Chicago inspectors allow to pass as No. 2?

German tariff radicals now propose to levy tariff war on "any country" not giving German goods fair reciprocity treatment. That is supposed to mean the United States, whose consumption of German toys and patent medicines is not great enough to satisfy the German farmers' sense of the proprieties!

It is recorded that a forger tore two checks from a South Dakota grain elevator clerk's check-book and, having filled in the blanks as neatly as the bookkeeper might have done it, was paid \$280 by the accommodating lady cashier, who doesn't so much as remember how he looked. He didn't belong to the bunch she was interested in. But the query suggests itself, was not some one inexcusably careless in leaving a check-book lying around "promiscuous" like that?

Judging from the way new corn grades at Chicago it may be said that at least half of the 2,000 and odd million bushels of corn of this year's crop is out of condition and unfit for safe transportation and storage without artificial drying. If this is so, why do not grain elevator men take hold of this damp and damaged corn and bring it up to a standard grade by drying and curing it? If they add only five cents per bushel to that inferior 1,000 million bushels, they would make the country \$50,000,000 richer and perhaps might secure a good share of it for themselves.

Secretary Wilson, of the Agricultural Department, is both jubilant and exuberant. He takes his job seriously and "points with pride" to a fixed capital in American agriculture of 20,000 million dollars, placed on over 5,000,000 farms, which cover 841,000,000 acres, of which 415,000,000 are improved; he rejoices in farm products worth 5,000 million dollars in a single year, of which \$828,000,000 represents corn, and so on. It doesn't matter that these figures are Census Bureau compilations, which his statistician, Mr. Hyde, and his friends, declare are no good. In agriculture we Americans are "It" with a big I, and that's all there is to it. Inci-

dentally, Secretary Wilson is getting to be "first in the hearts," etc., at such a rate he threatens to eclipse even the original and only and lamented Jerry Rusk in popularity.

The joint committee who interviewed the Warehouse Commission on corn inspection held a little meeting to compare notes after the interview. The Commissioners certainly seemed to appreciate the situation, and the committee feel that their effort has not been in vain. The problem is, of course, a vexed one; but so strong a presentation as was made of the country dealers' case could not, it was felt, be wholly without some good.

The Grain Dealers' Union of Southwestern Iowa and Northwestern Missouri is extending its usefulness by securing the co-operation of a greater number of Missouri grain dealers. The recent meeting at Moberly, Mo., will be followed by more meetings in that territory than formerly, and it is hoped every grain dealer in that part of the state will take advantage of the opportunity offered by becoming a member and attending meetings regularly.

Secretary May of Minneapolis should have the free co-operation of regular grain dealers in the Southern Dakota and Southern Minnesota Association's territory to extend its membership, a work to which he is now giving special attention. It would be as reasonable to call a farmer a modern man who thrashes his wheat with a flail or shells his corn in a hand mill as to call a grain dealer progressive who fails to join his local and state associations.

The U. S. Supreme Court has finally disposed of the Leonard Seed Company case against certain insurance companies. The building of the company was destroyed by an "explosion and fire" originating in an adjoining mill. The insurance companies refused to pay, on the ground that their liability was limited to loss by fire; and that in this case the explosion had wrecked the property before the fire took place. The case had been tried twice before a jury, with verdicts for the insurance companies, only to have those judgments reversed in the upper courts. The latter held, very sensibly, that the explosion which destroyed the properties was the result of fire and not the fire a result of the explosion.

All the shipping interests of the country have substantially agreed to urge the passage by congress of a bill called the "Elkins Bill" to amend the interstate commerce act. It is referred to more in detail on another page. The bill is a compromise; but it seems sufficient to protect shippers, while it also conserves all legitimate rights of the railways—some think it goes farther than that. However, the bill is drastic in no respect, and is probably the best that can be obtained now. Grain men should, therefore, urge upon their congressmen their wish that the bill be passed. Write your member direct and don't assume that he is right on the question. The fate of a London Dock bill, a few days ago, is notice that no transportation legislation can be obtained from Congress at this or any session without the united and con-



tinuous pressure of all the shipping interests of the country directly exerted.

The agitation for a Greater Erie Canal is materially strengthened by the considerable increase of its miscellaneous freight business for the season just ended, while in spite of the elevator pool discrimination against it, the traffic in grain (12,348,550 bushels) was only 411,000 bushels below that of 1901. The heavy increase in the miscellaneous business encourages the friends to believe that with an enlarged canal providing for larger and faster boats there is no reason why it should not carry a larger share of the grain business than even the railroads, which this year transported 40,253,000 bushels to New York.

The Michigan Hay Dealers' Association's semi-annual meeting to be held at Saginaw on December 30 is a more than ordinarily important one to Michigan hay men. The general effect of the recent decision of the Interstate Commerce Commission on a hay classification and the question of the recovery of sums paid under the illegal classification will be presented to the Association from a legal standpoint, and aside from the formal program which appears in the Hay Department, such other subjects as reciprocal demurrage, the establishment of a bureau of statistics, the practice of sending market letters and quotations to others than regular dealers, the appointment of an arbitration committee, etc., will be taken up for action.

The success of the New Orleans Maritime Exchange inspection department has been quite remarkable, considering the local opposition and the unwillingness of foreign exchanges to recognize its export certificates. Yet beginning with July, in which month, of 1,600,950 bushels of wheat and 42,857 bushels of corn, it inspected out 1,230,000 bushels of wheat and all the corn, the Exchange has inspected by far the larger part of the export grain and practically all of the receipts, the total figures being to December 1, 8,631 cars into the elevators, and for export 8,528,144 bushels of wheat, 155,938 bushels of corn and 13,928 bushels of rye, or a total of 8,698,000 bushels out of a grand total for the port of 9,340,105 bushels. At this rate the foreign buyer will soon be compelled to take the Exchange's receipts or none at all.

The Interstate Commerce Commission begins to-day, December 15, an enquiry into the "propriety" of advancing rates from the Mississippi river and points beyond to the East and South as now proposed by the roads, effective about January 1. This is said to be quite an unprecedented step by the Commission. It does not necessarily mean hostility to the advances, and it may even be doing the roads a service by enabling them to justify themselves before the public; and "then, again, it mayn't." Undoubtedly the expense of operating railroads has largely increased in the past two or three years, on account of advance on supplies of all kinds and wages; but at the same time their earnings, as shown in the little table in another column, are also greater per train mile than ever before. It would be an interesting fact, if it could be

elicited: the net income of the roads for dividends to stockholders at present rates if all the water were squeezed out of their bonds and stocks. But of course such an enquiry is not contemplated.

The Grain Dealers' National Mutual Fire Insurance Company of Indianapolis has been surprisingly successful thus far, having, within the short space of ninety days, obtained the necessary \$100,000 in note applications to legally organize. The formal organization will therefore take place on December 23 and the first policy issued to bear date December 24. There was manifestly a need for this organization, which thus begins its career with a most flattering promise of success.

Secretary Stibbens has done the trade another service by his statement of the trade custom, or rule, for settling defaults on acceptances of bids for "No. 3 or better" corn. The committee on trading rules of the National Association seems to have overlooked this matter, for which no rule is provided, but which is now so very important in view of the fact that inspection and natural conditions for the moment have made bids for contract corn obsolete. This digest of the practice of receivers is therefore most opportune. Fortunately, too, Mr. Stibbens has been to such pains to make a correct statement of the trade practice that dealers can safely rely upon it as being an authoritative and also reliable rule to follow should they be in the position of shippers referred to in the original enquiry.

The pushing of the Erie Canal question into New York state politics was rather a funny episode as detailed by the Public Ledger correspondent. The friends of the canal, with the political "wisdom of serpents," made an aggressive assault on the conventions of the two leading parties, giving forth the impression that whichever convention gave them the better canal platform would secure the Canal Association's endorsement for its candidates. Whereupon the Republicans adopted a good canal plank, but the Democrats a better one—in fact, just the kind of declaration on this issue that the canal men have been seeking for years. Later Governor Odell went one better than the Republican platform by putting himself squarely on the Democratic platform so far as this subject is concerned. But still the canal men were fairly under obligations to the Democratic party, and the Democratic managers had a right to expect that the Canal Association, composed as it is of representatives of the leading commercial organizations of the state, would give Mr. Coler the benefit of its indorsement. But the ingratitude of politics was again illustrated. It was found that partisanship was stronger than devotion to the interests of the canal. So many members announced their inability to support the Democratic ticket that the association decided that it could give neither party its support, and, therefore, suspended its agitation for the 1,000-ton barge canal until after election. Since election, however, Gov. Odell has manifested a disposition to stick to his ante-election platform agreements; and it now looks as though the canal question would be taken up by

him in good faith and pushed to a permanent settlement.

The house committee on commerce on December 8 began an enquiry touching the advisability of removing Statistician Hyde's division of statistics to the proposed Department of Commerce and Labor. The Agricultural Department strongly opposes the proposition, and declares that if the removal is made it will simply require the Department to create a new division of the same kind. During the course of the enquiry Mr. Hyde threw out another pointer as to Census Bureau methods, when he said that while that Bureau could find only 29,000 cotton ginneries, his division had the actual addresses of some 40,000. If the proposed new department should prove as efficient as the new Census Bureau, its value to commerce would be decidedly problematical. Mr. Hyde hasn't quite sprouted his wings yet, but at least he seems to have gotten off "first best" in the recent assault on his crop reports by the Census people.

Mr. J. J. Hill and his associate presidents of the merger roads in the Pacific Coast country are no doubt agreeably disappointed to find that their doleful prediction, when they reduced grain rates to the Coast, some months ago, that the farmers would get no benefit of the reduction, has been a false one. On the contrary, the reduction, which amounted to about 2c. per bushel, all went immediately to the pockets of the wheat growers of the "Inland Empire." This is conceded by the farmers themselves. President Lawrence, of the Farmers' Warehouse Company of Garfield, Wash., goes even farther to say that in addition to the freight reduction, the farmer is benefited by a remission also of  $\frac{3}{4}$ c. formerly claimed by the warehousemen for "margin," who have this season lost a portion of their "rightful charges;" so that, he says, "the farmer is getting two-thirds as much from the warehousemen and exporters as from the railroad. This fact," he continues, "ought to be made public in order that all may know the true conditions, and that the farmers are receiving the full benefits of the voluntary reductions and more." The same story comes up from California, where freights have been "unprecedentedly low" and where the grain buyers have capitulated to the farmers. The trade need not be reminded of this universal tendency to give all the value of the grain to the farmer except the meagerest margin; and if in some part of the country, as in Illinois at this moment, the dealers seem to be taking an unwarranted margin, a fair enquiry will disclose the fact that conditions over which the dealer has no control, like Chicago inspection, say, make this wide margin imperative as a measure of safe business policy. In spite, then, of newspaper and agitators' vamping about "trusts" in the trade, the element of competition among buyers is under all circumstances sufficiently powerful to do elsewhere what we have seen was last fall done on the Coast—that is, give every advantage of lower freights and the removal of other carrying and handling charges to the growers and not to the buyers of grain in the country.



## TRADE NOTES

Kimball Bros., manufacturers of scales, etc., at Council Bluffs, Iowa, are to erect a new foundry.

The Burrell Engineering & Construction Co., Chicago, has been incorporated with a capital stock of \$1,000.

Increase of business has made it necessary for the Robert Aitchison Perforated Metal Co. of Chicago to add to the capacity of its plant.

W. J. Scott, Chicago representative of the Invinible Grain Cleaner Co., has changed his headquarters from the Wyoming Hotel to 94 Traders' Building.

Fairbanks, Morse & Co.'s Omaha branch was visited by fire last month which damaged their stock to the extent of about \$35,000 and compelled them to seek new quarters.

The W. S. Cleveland Elevator Building Co. of Minneapolis has erected 47 frame elevators this season and is now completing a 50,000-bushel brick storage tank in Minneapolis after Mr. Cleveland's patented design.

"Trade is good," says President C. N. Howes of the Invincible Grain Cleaner Co., Silver Creek, N. Y. During most of the year they have been enlarging and improving their plant to keep pace with the growth of their business.

In a six-page circular entitled, Continued Patronage is Testimony Par Excellence, the Hall Distributor Co., Omaha, Neb., gives a partial list of users of the Hall Automatic Overflow Signaling Grain Distributor which needs no comment.

Late contracts of the Skillin & Richards Mfg. Co. of Chicago include machinery for Bartlett, Kuhn & Co.'s new grain elevator at Terre Haute, Ind.; machinery for the B. Stern Milling Co.'s grain elevator at Milwaukee, Wis.; machinery, including improved hopper scale and garner bottoms, for Richardson & Co.'s transfer elevator at Gainesville, Tex., and new cake carrier for the American Linseed Co.'s Wright & Hill Mill at Chicago, which enables one man to do the work of five in piling oil cake in the warehouse.

The Olds Motor Works, Lansing, Mich., desire to impress upon prospective purchasers of gasoline engines that an important feature of the Olds Gas or Gasoline Engines is the large diameter and great strength of the crank shafts. These parts are all solid forged steel and there is no possible chance for the shaft to break or the balance wheel to quiver at each impulse of the engine. The simplicity of the Olds Engines is a desirable feature as the absence of complications enables any one with slight experience to run one successfully.

The smoke stack is such a conspicuous part of the large elevator of manufacturing plant that it is desirable that it present a well-kept appearance as well as be preserved from rust. The expense and annoyance of frequent repainting should be avoided by using only the best paint for this purpose. Dixon's Silica-Graphite Paint is specially prepared for stack protection by the Jos. Dixon Crucible Co. of Jersey City, N. J., and has been continuously used for nearly 40 years by many of the largest steamship and manufacturing companies in different parts of the world.

If you want to keep thoroughly posted on elevating, conveying and power transmission appliances, request the Stephens-Adamson Mfg. Co. of Aurora, Ill., to put you on their mailing list for their special bulletins. Regarding these the company say: "These bulletins are published frequently by us for the purpose of bringing before the trade our line of standard appliances, their application under various conditions and also to illustrate and describe improvements in our manufacture as developed from time to time." Among recent large shipments made by this company were ten cars of

machinery for the Southern Pacific Railway Co.'s new elevator at Galveston, Texas.

Geo. M. Robinson, president of the Charter Gas Engine Co., Sterling, Ill., this month completes thirty years' service for the company, he having entered that office in December, 1872. In a recent letter his company says: "Business is fine and has been all the year. We have just booked an order for three 40-horsepower Charters from a party that already has one of that size in use. Our large engines are going very rapidly."

The Weller Mfg. Co. of Chicago made a number of important changes in its office during the past month to fit the conditions of an unusually large amount of business. The office was lengthened and widened to make desk room for the increased office force, and partitions were built to separate the stairway from the office and one of the working floors. In addition, the buildings of the entire plant were treated to a coat of paint and everything made ship shape for the winter months.

### S. J. SMITH.

Looking down the line, one is impressed with the idea that when once a farmer leaves the farm for the elevator it is hard work getting him back to



S. J. SMITH, MADEIRA, MINN.

the land again as a farmer for good. S. J. Smith, grain buyer for C. S. Christianson & Co., at Madeira, Minn., has tried it, but he now completes the circuit at the elevator again.

Born at Fultonville, N. Y., his father an engineer and machinist, the lad spent a large part of his youth on a farm in the beautiful Mohawk Valley with his grandfather. At eighteen, however, he became a carpenter, and on reaching his majority came west to work at his trade. He settled at Beloit, Wis., but became bill clerk and general utility man in the C. & M. & St. P. freight office in that city instead of a carpenter. After three years there he moved westward again, and located in Red Wood county, where he worked in an elevator during the season and as a carpenter during the summer. With his savings he bought (1892) a farm, which he worked for ten seasons and then sold. Now he is in the grain business again—"I hope, to stay," he remarks. And it is a "good gamble" he will—they all do; both because they like it and when a man is en rapport with the business and doesn't gamble—that is to say, speculate—it generally pays. What better excuse?

Harry M. Wood, a farmer at Delavan, Ill., found in his corn field an ear having 34 rows and many others having 24 to 26 rows. The corn is the "Leaming," a soft corn grown especially to feed on the farm where it is grown.

## IN THE COURTS

L. H. Bailey was arrested at Chicago on November 3 charged with operating a grain speculation swindle under the name of Arthur L. Bradley & Co. at 263-65 La Salle street. He gave bonds.

The Christie-Street Commission Company (bucket shop) at Kansas City has begun suit to recover \$5,000 alleged to have been paid to the government in war taxes in excess of the amount legally due from them.

Hugh C. Dennis, Chas. Brooks and Thos. W. Garland of St. Louis were indicted by the federal grand jury and arrested charged with using the mails to defraud. They were connected with the Rialto Grain and Securities Company. They gave bonds.

The Evansville Grain Company, Evansville, Ind., on November 20 sued the Louisville & Nashville Railroad Company for \$2,000 damages, alleging that the company has charged them an excess of \$2 per car on 1,000 cars for hauling ties from the river front to the Belt Line.

C. C. Castle, representing the Canadian Department of Justice, has begun several actions against the C. P. Ry. Co. and its agent at Sinaluta, Man., under the grain act, alleging discriminations in the furnishing of grain cars to shippers. The fine upon conviction ranges between \$10 and \$1,000 for each offense.

The American Grain Purifier Constructing Company, which is the trading title of D. H. Stuhr, Davenport, Iowa, and the McCray-Morrison Company, Kentland, Ind., on November 24 filed suit in the United States Circuit Court at Chicago against Charles H. Requa and others, individually and as Requa Brothers, a Board of Trade firm, to restrain them from infringing the rights involved in the grain purifying process known as the "Cazalet" patent.

The suit brought in New York by Archibald A. Hutchinson and Victor K. McElheny, Jr., against the directors of the American Malting Company, to compel them to restore to the treasury of the company \$1,855,350 alleged to have been illegally paid as dividends to the holders of preferred stock of the company, and also to restore \$650,000 alleged to have been lost to the company by the mismanagement of the directors, was on November 18 dismissed in the Supreme Court of that city.

The action of the Solomon Farmers' Coöperative Association against C. Hoffman & Son of Enterprise for an injunction has been decided at Abilene in favor of the Hoffmans. Hoffman & Son own one of the two elevators, but it is claimed they leased it to the Farmers' Association on an agreement that they should receive one-third of all the wheat bought in the town. They did not get the wheat, so they claim, and therefore took possession of the elevator. This the farmers tried to prevent by injunction. Judge Moore of the district court dismissed the case. The Hoffmans are now operating one elevator and the Farmers' Association the other. The latter is doing far less business than it did last year, it is said.

The case of Peter T. Zin of Dakota against the Schwedler Grain Company of West Superior, Wis., was on November 8 dismissed in the Superior Court. The original suit was for \$1,300, the plaintiff claiming that he had shipped grain to that value to the company and that they had received the money for it. Later the complaint was made to demand \$600. A motion to dismiss was granted by the court without any evidence being heard from the defense. This case, when begun, being accompanied by garnishée proceedings, tied up the funds of the grain company, and on the same day, February 11, 1902, on the complaint of Thos. Boyle of Melville, N. D., Erhard Schwedler, of the company, was arrested on a charge of embezzlement, Boyle claiming that the company had not turned over to him the proceeds of a carload of flax sold on commission for him. On



November 13 Schwedler was discharged by the court, the state having failed to make out a case against him.

Beginning on November 18, the suit of Geo. H. Phillips of Chicago against J. O. Baird of Williamsfield, Know County, was tried at Galesburg, Ill. Phillips sued to recover something over \$20,000 paid out by him as margins for Baird in grain and provision speculation. Baird defended on the ground that the business was simply gambling and that, therefore, he was not indebted to Phillips as charged. After a hearing covering more than two days a verdict was rendered in favor of Phillips for \$20,700.

In the case of the Farmers' Elevator Company of Chokio, Minn., against G. F. Sunwall & Co., commission men at Minneapolis, judgment was given on November 20 for the defendants. The plaintiff company alleged that it had sold a quantity of grain to Sunwall & Co. on which there was a balance of \$1,919 due. The defense claimed that this amount had been lost by the plaintiff in grain speculation; but the plaintiff company set up the claim that the said losses were made in deals in futures—gambling, in a word.

In the damage suit of W. D. Moody against G. Peirano at San Jose, Cal., on November 24, the plaintiff was given a judgment for \$400. Moody is a farmer, and claimed that in October, 1901, he bought 27,760 pounds of seed wheat from G. Peirano. The wheat was understood to be of the White Australian variety, and Moody claimed that Peirano warranted it to be of that variety. Moody sowed the wheat for hay and was greatly disappointed in both quantity and quality of the hay crop produced from the seed.

The case of Alonzo J. Cutler against Chas. W. Partridge, in the Appellate Court at Chicago, on appeal by Partridge, was reversed on November 12 because of some errors on the part of the trial court. The case was first tried in 1896 and a verdict given for Cutler for \$54,062. This was sent back for retrial and a verdict of \$54,062.50 given. The appeal from the judgment is now sustained. The main point at issue in the case was whether the transactions in question, dealings in grain on the Board of Trade in the years 1892 and 1893, were or were not gambling transactions.

In the case of the Boyd Commission Company vs. Coates, recently decided by the Kentucky Court of Appeals, it appears that the appellee subjected to attachment a fund in bank belonging to the appellant, a foreign corporation, to satisfy a claim of the appellee for money alleged to have been lost by him in a bucket shop conducted in Kentucky by their agent. The appellant contended that the transaction was not a wagering transaction, but a bona fide contract of bargain and sale, but the court held that the proof showed that it was a wagering contract, and that the fund was properly subjected to the payment of the claim.

The firms of Riley, Parker & McVickar, MacLennan Bros. and Joseph P. Graves, grain dealers at Winnipeg, on November 28 began suit against Thos. H. Metcalfe and twenty-one other individuals and firms engaged in the grain trade of that city and members of the Winnipeg Grain and Produce Exchange, asking that damages to the extent of \$5,000 be granted to each of the two firms, MacLennan Bros. and Riley, Parker & McVickar, and a like amount to Joseph P. Graves. They also ask that an injunction be issued by the court restraining the defendants from continuing an alleged boycott. The defendants are known to the trade as "independent grain companies"; and they allege that since October 1 the defendants have conspired and agreed to boycott the plaintiffs and to refuse to have any dealing with either the plaintiffs or any firms or individuals who do business with them, and that owing to such conspiracy the plaintiffs, who, up to that date, had done a large business with many of the defendants, had since then suffered large losses, the direct cause of the boycott. Subsequently the complainants' bill was amended to claim damages of \$20,000 for each

case instead of \$5,000. And still later, W. W. Gibbins, trading as W. W. Gibbins & Co., filed a similar action against the same defendants, asking damages of \$50,000 for losses sustained by the alleged boycott. He also asks for an injunction.

The arbitration committee of the St. Louis Merchants' Exchange on December 5 rendered a final decision in the case of E. W. Gessler & Co. against the Nansen Commission Co. The subject matter was a settlement price for oats traded in during the July corner. The facts are that in July, while oats were selling on the open market at 32½ cents, Corwin H. Spencer entered the pit and, acting for the Stobie Cereal Company, ran up the bid on July oats to 50 cents. In a deal for 10,000 bushels between the Nansen Commission Company and E. W. Gessler & Co. there was a default, and the parties presented the case to the committee on contracts for settlement. The committee decided that 50 cents was the settling price on the last day of the month, but the case was appealed to the higher committee, which has now decided upon a compromise price of 42 cents.

### "NO. 3 OR BETTER" CORN.

The following correspondence will be of great interest to shippers of corn at this time. The inquiry comes from a prominent firm in a leading market and was addressed to Secretary Stibbens of the National association. It is as follows:

We would like to know whether the National Grain Association has any rules covering the term "No. 3 or better" corn; that is, where a purchase is made track at some interior point of "No. 3 or better" corn, has the seller the right to buy No. 3 corn on track and deliver it to the party with whom he has made the sale?

It is generally understood that in bidding on "No. 3 or better" corn, the buyer expects to get a large proportion of No. 2, and that he does not expect to get all No. 3. A certain party belonging to the association made us a sale of "No. 3 or better" corn, and failed to deliver any part of it. His time will be up to-morrow. He has wired a commission house here to buy No. 3 corn and deliver to us. We told them we would not accept corn bought here on the contract as our bid was made at an interior point. We also had another case to-day where one of our correspondents wired us to buy No. 3 corn and deliver it to a commission house here who had bought of them at their station, "No. 3 or better." This party also notified us that he would not accept the corn on the sale. If you can give us any information on this point, or advise us of any decision made by your arbitration committee, we will be much obliged.

To this Mr. Stibbens made the following reply:

We have no rules of the National Association covering this particular question; but the custom of the trade in Chicago, and I presume other markets, is that when a firm bids the country dealers for "No. 3 or better" corn, it is presumed he does so because he desires the particular billing; and it is also presumed that some portion of the corn he buys will grade No. 2, which is to his advantage; and the custom is that it is optional with the buyer in regard to allowing the seller to buy a No. 3 corn at point of destination for the purpose of filling his contract. This particular question has been arbitrated by the Chicago Board of Trade, and they decided as above stated.

The party who sold you the "No. 3 or better" corn could buy No. 3 corn to fill his contract, if agreeable to you, but the matter is entirely at your option; and as you object to it, you can compel the party in the country to ship you the corn he sold, or pay you the difference in money at expiration of contract.

I have interviewed some of the largest concerns in this market who buy millions of bushels of grain on track at country stations every year, and it is the custom of the trade that governs such questions as this.

The fact that a portion of the corn now arriving is No. 2, it would be unfair to the buyer of "No. 3 or better" corn in the country to allow the seller to buy No. 3 corn in your market for the purpose of filling his contract.

Oats crop is the largest ever raised. This is not a new discovery, but like Lydia Pinkham's picture with her patent medicine advertisement, will be with you all season. Quality is bad in some places, but the poor horses will have to eat them. Need some export demand to absorb the surplus. Only two States raised over a hundred million this year. Illinois leads with 153,000,000 bushels and Iowa follows with 123,000,000 bushels. Wisconsin is third with 95,000,000 and Minnesota next with 82,000,000 bushels. Indiana, Ohio and Michigan each have about forty millions.—C. A. King & Co., Toledo.

### INDIANA GRAIN DEALERS.

The annual meeting of the Indiana Grain Dealers' Association will be held at the Denison Hotel, Indianapolis, on Thursday and Friday, January 8 and 9, 1903.

At this writing the program had not been completed, but Secretary Sampson may be relied upon to prepare an interesting agenda. The Indianapolis Board of Trade will contribute to the social features of the meeting by an entertainment on the evening of January 8 for all grain dealers and their friends.

This flourishing association now includes about 50 per cent of the grain dealers of the state of Indiana. It should include every man of them; and no doubt accessions will be made at this meeting. Every member should make a special effort to attend the meeting and take his neighbors with him.

### GRAIN DEALERS' MUTUAL INSURANCE.

Secretary McCotter of the Grain Dealers' National Mutual Fire Insurance Company of Indianapolis announces that the organization work of that company will be completed at a charter meeting to be held at Indianapolis on December 23, the necessary \$100,000 in note applications having been secured. At this meeting a secretary and a board of not less than five directors will be elected to serve until January, 1904. The first policies will bear date of December 24, 1902.

The secretary says: "With one exception, no company has accumulated over one-half as much business for a charter and none so quickly. The commissioners were appointed to act on September 10. The first soliciting was done on September 23 and on December 23 the work will be completed. There is not time or opportunity to make statistics of the business. The charter will be granted for the \$100,000 in premium notes and \$20,000 cash. There will be about \$650,000 at risk on about 240 properties, with a liability of not destroying more than one by any one fire. The average policy is \$2,500 and in no case exceeds \$5,000. The quality of the business, we believe, will average physically above the normal and be further improved by future inspections. We have records that only about one member in twenty has ever lost an elevator by fire, and about one in twenty-five has any indebtedness. We feel it a matter of self-congratulation by every member for the part he has taken. The foundation is laid for a solid and successful company."

### ANALYSIS OF SOFT CORN.

Profs. W. J. Kennedy and P. G. Holden of the Iowa Agricultural Experiment Station have taken up the question of utilizing the immense quantity of soft corn on hand in that state, and have begun a practical investigation into its value for feeding by testing it with a lot of good feeding steers, half of which will be fed on 1900 corn and the other half on soft corn. This test will cover five months' time, only a part of which has elapsed. Present indications, however, are that the soft corn possesses nearly as much feeding value as the fully matured corn.

"Chemical analysis," says the Professors, "shows that the soft corn contains about the same amount of protein and fat as mature corn. The only perceptible difference is that it contains about 20 per cent more water and in some instances a trifle higher percentage of protein. On a water free basis, the results are approximately the same. This would indicate that when the corn is husked out and dried it will contain, pound for pound, as much nourishment as fully matured corn.

"The chaffy appearance of the corn is unmistakable evidence that the yield per acre is very much less than it would have been had the corn fully matured. There will be a much larger percentage of cob in comparison to the amount of corn than in former years. Thus corn and cob meal will not be as valuable as when fully matured corn



has been ground. Our analysis differs from that reported by Prof. Snyder of the Minnesota Station, who stated that the cob contained much of the nourishment which was not to be found in the corn itself. We were unable to find any noticeable difference in the chemical composition of the cob of the soft corn, and that of the cob of mature corn.

"From the chemical analysis made here, we would be inclined to regard 120 bushels of the soft corn in its present state to be equal in feeding value to 100 bushels of matured corn. As the soft corn dries out, this difference will gradually grow less, pound for pound, until the soft corn is thoroughly dried, when they will be of equal value, pound for pound."

### WEIGHING AT MINNEAPOLIS.

[From a paper by P. P. Quist, Chief Weighmaster for Minnesota, read before the members of the Southern Minnesota and South Dakota Grain Dealers' Association at Minneapolis, July 15.]

To turn to a phase of the work which interests the shipper to no small degree—namely, that of locating his shortage—I will show you as briefly as possible some of the many things the department must contend with in the endeavor to protect the rights of all parties involved.

Laying aside the question of error in computing the weight, we have several elements which enter into a shortage between the point of shipment and the point of destination, of which perhaps the following are the most important from the fact that they cause more of the real trouble than anything else: First, the variation in weights given by unreliable and ill-cared for scales; second, waste which comes from a careless cooping of cars by the shipper or his agents; third, waste from careless loading of cars; fourth, pilfering from the car after it has started on its destination, or even while standing at the point of shipment waiting to be put into the train.

These in brief are the principal sources of the shortages we are called upon to investigate; and from a careful study of the situation we have adopted a system of having reported each morning all cars found in bad order with a specific report as to the manner of the leak and an accurate description of the condition of the car. In following this method a few interesting figures present themselves, which will readily prove the truth of the foregoing statements.

Out of a total of 191,079 cars weighed by the Minneapolis weighing department for a period covered from Sept. 1, 1901, to July 1, 1902, there were reported 18,639 in bad order, which is an astonishingly large number. This is further interesting when subdivided as follows: 8,437 with leaky grain doors, 1,750 with doors open, 4,370 cars leaking in body of car, 2,762 without seals and 1,320 with broken seals.

The leaky grain door is easily accounted for when it is seen that a great number of shippers use cull lumber which is unable to stand the pressure of the grain, one board being weaker than another and thus is bulged out. Again, we find often times that a car will leak over the end door, which is caused by switching a car that is loaded too high at the ends, the sudden jolting throwing the grain up against the door and over the protection of boards which is generally put up. Thus we see that it is quite possible for the shipper to lose a considerable amount of grain while it is in transit, and all this through no real fault of the carrier or of any parties handling the grain except himself. With greater care by the shipper the number of shortages will decrease considerably.

Referring for a moment to the other conditions mentioned, it is astonishing to note the large number of cars arriving with doors wide open, or without seals or with broken seals. The first inference would be that these cars had been tampered with, and beyond a doubt there are a great many instances when this very thing occurs. The matter of pilferage, which is so greatly augmented by that most pernicious practice of car sweeping, has been a problem which has occupied the department's attention during the past year to such an extent that

I am happy at this time to make the statement that where one year ago it was possible for a person to walk through the railroad yards and see scores of car sweepers at work, some with a bushel and some with more grain in sacks, to-day it is the exception to find a single sweeper in all the vast area covered by our railroad yards. This matter has been taken up most systematically by the department, and the most hearty cooperation of the railroad and elevator and mill companies has made the reform a success. The department has kept watchmen ever on the alert for car sweepers and pilferers, and is still continuing to do so. The correction of this vice has been accomplished, for the most part, with the aid of the municipal authorities of the city of Minneapolis in hacking up the action taken by the department in its endeavors.

### BUFFALO GRAIN RECEIPTS FALL OFF.

The receipts of grain at Buffalo via the lake for the year ending December 1 aggregated 103,783,690 bushels, as compared with 110,441,781 hushels for the preceding year; a falling off of 6,658,091 hushels.

Buffalo grain men are naturally not pleased at the showing and say there are a number of reasons why the receipts this year were not as great as last. In the first place, there was more wheat, barley and rye received than a year ago, the shortage being in corn and oats. The short corn crop of 1901 is responsible for the falling off in the movement of corn, and it is said that European buyers are now shipping through Canadian routes much of the grain which formerly moved through Buffalo.

Again, although there were enough cars, the motive power supplied by the railroads was not sufficient to handle all the grain that might have come through the port by rail. Canal facilities were also inadequate.

In four instances out of six there were increases in the receipts. The amount of flour received was 11,150,354, as against 10,565,454 last year. Wheat jumped up to 56,521,298 this year as against 53,400,476 last year. Barley climbed up to 7,169,849 as against 6,355,120 last year. Rye more than doubled with a jump to 3,514,988 from 1,129,342 the year previous. Yet the fall in oats and corn was so great as to counteract these increases.

The American Malting Company's annual report is rather an unfavorable one. The gross profits increased nearly \$30,000 and interest on bonds decreased \$14,032; but the net surplus decreased nearly \$60,000.

The largest cargo of wheat ever brought through inland waterways from the lakes was the barge Hamilton of the Montreal Transportation Company's line, which started from Fort William about November 2 with 71,000 bushels on board, as it was not thought safe to carry this amount down the St. Lawrence canal, 11,000 bushels were taken out, leaving an even 60,000 bushels of No. 1 hard wheat, which was brought through and delivered to the Ogilvie Milling Company at Montreal. The previous record had been 50,000 bushels.

A country exchange grows rapturous over the growing possibilities of corn culture. It says: "Corn shredders this year have a new wrinkle. The corn first goes through the clothes wringer, then the shredder takes it and a tank at the side catches the juice after the milk is knocked out of the kernels. Let this stand 24 hours in a cool place, skim it, then add the rennet and press into cheese. The whey is then distilled and makes such an article of whiskey that three swallows of it will make a man pick his own pockets and trade his grandmother's tombstone for bottles to keep it in. The cobs can be used in upholstery and the shredded fodder makes animal sauerkraut. It wasn't the frost that hurt the corn, but just the lack of about two weeks of decent corn weather at both ends of the season. Just set the shredder a little close and it will give mush and milk already mixed."

## FACTS AND FIGURES

A gang of hoys engaged in stealing grain from cars in the yards at St. Joseph, Mo., have been broken up by the arrest of several of the most expert.

Australian buyers are hunting for milling oats, pearling harley and pease in Canada. The Canadian supply of pease and harley is not in excess of home demands.

Boston's November grain exports were 1,287,110 bushels of wheat, 61,738 hushels of corn, 63,928 hushels of oats, 49,983 bushels of barley and 16,200 bushels of flaxseed, making a total of 1,479,559 hushels, compared with 1,934,463 bushels same month of 1901. The total for the eleven months of 1902 was 15,361,092 bushels, against 33,911,101 hushels for same months of 1901.

The right of the Chicago Board of Trade to investigate charges made against its members by other members was upheld by the Appellate Court December 12, when the order of Judge Chytraus made last August restraining the board from investigating the case of the McNeil Grain Company of Sioux City, Iowa, against the Weare Commission Company was reversed.

Geo. A. Wells, secretary of the Iowa Grain Dealers' Association, in his final estimate of the Iowa crop of 1902 reports the total wheat acreage was 1,180,222 acres and the total net crop 13,670,511 bushels. The oats acreage was 3,921,945 acres and the net yield 121,745,017 bushels. The acreage of corn was 9,343,752 acres and the yield 338,028,459 bushels. In this instance the total crop is given, no report having been made on the loss of acreage or grain abandoned in the field. The acreage and net yield of other grain was as follows: Barley, 594,981 acres, 13,686,943 bushels; rye, 53,032 acres, 884,786 bushels; flax, 88,912 acres, 768,110 bushels. About 35 per cent of the corn crop is not marketable, 36 per cent will grade No. 4, 25 per cent No. 3 and 4 per cent No. 2. About 40 per cent of the oat crop has been marketed.

Wheat reached the record price for four years at San Francisco on November 24, 1.43½ per cental being the top. This is equal to 86.175 cents per bushel. While prices have been very high on the Coast, on account of Australian and South African demand, these high prices, a result of the "Big Four" manipulation, it is contended, has discouraged exports, which were less for November, 1902, than for November, 1901, and buyers for export went northward to the Sound. The total shipments to Australia in November were 278,341 centals, or nearly as much as went to Europe. On December 2 there were twelve vessels on the engaged list for Australia for various cargoes, the total on the grain list being 39,900 tons, against 68,800 tons a year ago. On the disengaged list there were 52,000 tons of tonnage, against 7,100 tons a year ago. The freight market had reached an extremely low point, having been broken by the large number of French vessels offering at cut rates, aided by the French government bounty.

Illustrative of the effect of the movement by the railways to increase the volume of the car- and train-load, the following table shows the average ton-mile revenue, freight train load and freight train mile revenue of all the railroads of the United States in each year from 1899 to 1901:

	Ton mile revenue.	Train load (tons).	Fr't train mile rev.
1899	0.970c	159.91	\$1.55
1890	0.927c	163.99	1.52
1891	0.929c	164.55	1.52
1892	0.941c	161.14	1.51
1893	0.893c	170.42	1.52
1894	0.864c	172.81	1.47
1895	0.839c	180.23	1.51
1896	0.821c	188.81	1.54
1897	0.797c	195.56	1.57
1898	0.758c	211.06	1.60
1899	0.726c	237.64	1.72
1900	0.746c	274.79	2.04
1901	0.756c	294.70	2.22



## VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, Dec. 6, 1902, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, bu.	Oats, bu.	Rye, bu.	Barley, bu.
Baltimore .....	700,000	561,000	175,000	243,000	.....
Boston .....	726,000	20,000	70,000	.....	.....
Buffalo .....	4,532,000	219,000	1,033,000	139,000	1,367,000
do. afloat .....	.....	.....	.....	.....	.....
Chicago .....	7,510,000	761,000	2,022,000	245,000	.....
do. afloat .....	.....	.....	.....	.....	.....
Detroit .....	608,000	65,000	57,000	81,000	22,000
do. afloat .....	.....	.....	.....	.....	.....
Duluth .....	2,660,000	1,000	214,000	10,000	343,000
do. afloat .....	.....	.....	.....	.....	.....
Fort Williams .....	890,000	.....	.....	.....	.....
do. afloat .....	.....	.....	.....	.....	.....
Galveston .....	1,184,000	199,000	.....	.....	.....
do. afloat .....	.....	.....	.....	.....	.....
Indianapolis .....	369,000	108,000	16,000	1,000	.....
Kansas City .....	1,608,000	107,000	47,000	.....	.....
Milwaukee .....	475,000	10,000	56,000	16,000	178,000
do. afloat .....	.....	.....	.....	.....	.....
Minneapolis .....	9,529,000	7,000	926,000	65,000	533,000
Montreal .....	107,000	13,000	39,000	2,000	81,000
New Orleans .....	1,766,000	141,000	.....	.....	.....
do. afloat .....	.....	.....	.....	.....	.....
New York .....	2,302,000	423,000	737,000	187,000	122,000
do. afloat .....	.....	.....	.....	.....	.....
Peoria .....	825,000	106,000	226,000	61,000	1,000
Philadelphia .....	287,000	202,000	129,000	5,000	.....
Port Arthur .....	75,000	.....	.....	.....	.....
do. afloat .....	.....	.....	.....	.....	.....
St. Louis .....	4,419,000	628,000	31,000	54,000	.....
do. afloat .....	.....	.....	.....	.....	.....
Toledo .....	931,000	116,000	659,000	38,000	2,000
do. afloat .....	.....	.....	.....	.....	.....
Toronto .....	18,000	.....	.....	.....	.....
On Canal .....	.....	.....	.....	.....	.....
On Lakes .....	4,069,000	172,000	257,000	148,000	1,025,000
On Miss. River .....	230,000	.....	.....	.....	.....
Grand Total .....	45,910,000	3,825,000	6,754,000	1,331,000	3,674,000
C. responding .....	.....	.....	.....	.....	.....
Rate 1901 .....	55,240,000	10,930,000	6,416,000	2,522,000	2,809,000
Weekly Inc. .....	858,000	958,000	.....	75,000	.....
Weekly Dec. .....	.....	.....	300,000	.....	157,000

## EXPORTS FROM ATLANTIC PORTS.

The export of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from the Atlantic ports during the two weeks ending December 6, as compared with same weeks last year, have been as follows:

Articles.	For week ending Dec. 6.		For week ending Dec. 7.		For week ending Dec. 29.		For week ending Dec. 30.	
	1902.	1901.	1902.	1901.	1902.	1901.	1902.	1901.
Wheat, bushels .....	2,344,000	1,388,000	2,231,000	2,300,000	.....	.....	.....	.....
Corn, bushels .....	1,060,000	239,000	731,000	603,000	.....	.....	.....	.....
Oats, bushels .....	128,000	32,000	367,000	32,000	.....	.....	.....	.....
Rye, bushels .....	65,000	.....	195,000	9,000	.....	.....	.....	.....
Barley, bushels .....	33,000	11,000	25,000	9,000	.....	.....	.....	.....
Flour, bbls. ....	443,400	302,100	380,100	370,200	.....	.....	.....	.....

## RANGE OF PRICES AT CHICAGO.

The daily range of prices for cash grain at Chicago for the month ending Dec. 12, has been as follows:

NOVEMBER	NO. 2* R.W. WHT		NO. 1 NO.* SP. WHT		CORN, NO. 2		ST. OATS.		NO. 2 RYE.		NO. N. W. FLAXSEED	
	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.
13.....	71½	72	71½	72½	54½	54½	31	34½	50½	51	1.23	1.23
14.....	71½	72½	72½	73½	54½	55	32½	34	52	52	1.21	1.21
15.....	72½	73½	73½	74½	55	55½	31½	31½	47½	47½	.....	.....
16.....	72½	73	73½	74½	55½	55½	32	34	50½	50½	1.20	1.20
17.....	73	73½	73½	74	57½	57½	32	33	51½	51½	.....	.....
18.....	73½	74	74½	75	58½	58½	31½	34½	53½	53½	.....	.....
19.....	75½	77½	75½	77½	59	59	33½	33½	53	53	.....	.....
20.....	74½	75½	75½	76½	56½	56½	32½	36	52	52	1.22	1.22
21.....	74	75	74½	76½	55	55	33½	33½	.....	.....	.....	.....
22.....	74½	75½	74½	76	55	55	30	36	.....	.....	1.21	1.21
23.....	73½	74½	73½	75½	53½	53½	34	35½	.....	.....	.....	.....
24.....	74½	75	75	76	54½	54½	34	34½	52	52½	.....	.....
25.....	74½	75½	75	76½	55½	55½	34	35	52	53	1.20	1.20
26.....	73½	74½	74½	75	54½	54½	34½	34½	.....	.....	.....	.....
27.....	73½	74½	74½	75	54½	54½	34½	34½	.....	.....	.....	.....
28.....	73½	74½	74½	75	54½	54½	34½	34½	.....	.....	.....	.....
29.....	73½	74½	74½	75	54½	54½	34½	34½	.....	.....	.....	.....
30.....	73½	74½	74½	75	54½	54½	34½	34½	.....	.....	.....	.....
31.....	73½	74½	74½	75	54½	54½	34½	34½	.....	.....	.....	.....
Dec.—	72	73½	73	74½	53	53	33	33	50½	50½	.....	.....
1.....	71½	72½	72½	73½	54½	54½	33	34	50½	50½	.....	.....
2.....	72½	74	73½	75	55	55½	33½	33½	50	50	.....	.....
3.....	72½	73½	73½	74½	55½	55½	33	33½	49	49	.....	.....
4.....	72½	73½	73½	74½	55	55	33	33½	49½	49½	.....	.....
5.....	72½	73½	73½	74½	55	55	33	33½	49½	49½	.....	.....
6.....	72½	73½	73½	74½	55	55	34	35	.....	.....	.....	.....
7.....	72½	73½	73½	74½	54	54	33½	31½	49½	52½	.....	.....
8.....	73½	76½	73½	76½	55	55	33	34	.....	.....	.....	.....
9.....	75½	77	75½	77	56½	56½	.....	.....	.....	.....	.....	.....
10.....	74½	75½	74½	75½	57	57	32½	32½	52	52	.....	.....
11.....	74½	75½	74½	75½	57	57	32½	32½	52	52	.....	.....
12.....	74½	75½	74½	75½	57	57	32½	32½	52	52	.....	.....

\*Nominal price. † Holiday.

During the week ending November 14, Prime Contract Timothy Seed sold at \$3.75@4.10 per cental; Prime Contract Clover Seed at \$11.15; Hungarian at \$1.00@1.35; German Millet at \$0.75@1.15; Buckwheat at \$1.30@1.45 per 100 pounds.

During the week ending November 21, Prime Contract Timothy Seed sold at \$3.80@4.00 per cental; Prime Contract Clover Seed at \$11.00@11.15; Hungarian at \$1.10@1.35; German Millet at \$1.00@1.25; buckwheat at \$1.30@1.45.

During the week ending November 28, Prime Contract Timothy Seed sold at \$3.80@4.00 per cental; Prime Contract Clover Seed at \$10.90@11.00; Hun-

garian at \$1.10@1.35; German Millet at \$1.00@1.25; buckwheat at \$1.30@1.45 per 100 pounds.

During the week ending December 5, Prime Contract Timothy Seed sold at \$4.00@4.15 per cental; Prime Contract Clover Seed at \$10.90; Hungarian at \$1.10@1.35; German Millet at \$1.00@1.25; buckwheat at \$1.35@1.45.

## RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of November, 1902.

**BALTIMORE**—Reported by Wm. F. Whalley, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1902.	1901.	1902.	1901.
Wheat, bushels .....	595,489	1,517,296	417,376	1,109,860
Corn, bushels .....	858,651	771,616	95,935	378,157
Oats, bushels .....	120,235	161,530	51,114	623
Barley, bushels .....	36,331	22,990	.....	.....
Rye, bushels .....	432,343	105,889	331,284	51,427
Timothy Seed, bushels ..	2,930	1,402	4,035	.....
Clover Seed, bushels .....	.....	4,097	523	.....
Hay, tons .....	6,350	4,958	1,477	1,651
Flour, bbls. ....	310,242	425,681	310,029	305,895

**BOSTON**—Reported by Elwyn G. Preston, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1902.	1901.	1902.	1901.
Flour, bbls. ....	230,793	242,979	101,104	122,534
Wheat, bushels .....	1,622,410	1,451,539	1,287,710	1,390,231
Corn, bushels .....	171,588	314,630	61,738	472,933
Oats, bushels .....	503,972	447,871	63,921	65,299
Rye, bushels .....	3,003	1,230	.....	.....
Barley, bushels .....	97,637	10,000	49,983	.....
Flax Seed, bushels .....	280,072	212,218	16,200	67,961
Millfeed, tons .....	1,200	1,400	629	408
Hay, tons .....	14,570	19,270	3,050	5,661

**BUFFALO**—Reported by F. Howard Mason, secretary of the Merchants Exchange. Receipts by lake; shipment by rail.

Articles.	Receipts.		Shipments.	
	1902.	1901.	1902.	1901.
Wheat, bushels .....	11,482,714	7,727,049	7,211,000	4,969,000
Corn, bushels .....	2,720,505	2,450,000	2,152,000	1,853,000
Oats, bushels .....	2,820,642	2,293,400	1,716,000	1,083,000
Barley, bushels .....	2,984,516	2,188,941	380,500	947,000
Rye, bushels .....	710,998	65,000	181,000	22,000
Other Grass Seed, bushels	81,270	30,412	.....	.....
Flax Seed, bushels .....	3,989,310	4,591,590	.....	.....
" lbs. ....	.....	.....	.....	.....
Flour, bbls. ....	2,150,351	1,306,692	.....	.....

**CHICAGO**—Reported by Geo. H. Stone, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1902.	1901.	1902.	1901.
Wheat, bushels .....	4,605,935	5,421,181	2,773,063	3,472,442
Corn, bushels .....	4,439,679	2,885,698	4,840,575	3,889,593
Oats, bushels .....	7,930,917	6,912,152	5,831,751	7,157,522
Barley, bushels .....	2,101,981	2,669,750	565,990	544,817
Rye, bushels .....	584,875	401,978	572,860	21,939
Timothy Seed, lbs. ....	7,114,820	2,826,855	2,546,863	1,711,049
Clover Seed, lbs. ....	2,012,460	1,016,186	617,073	206,809
Other Grass Seed, lbs. ....	2,085,259	2,336,261	1,825,873	1,131,787
Flax Seed, bushels .....	961,689	674,654	55,928	117,572
Broom Corn, lbs. ....	2,334,400	2,407,300	1,503,090	1,296,998
Hay, tons .....	14,614	18,534	779	1,304
Flour, bbls. ....	606,739	898,517	456,229	652,583

**CINCINNATI**—Reported by C. B. Murray, superintendent of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1902.	1901.	1902.	1901.
Wheat, bushels .....	230,952	77,198	127,656	39,950
Corn, bushels .....	473,900	376,531	146,207	100,281
Oats, bushels .....	416,864	290,200	83,770	114,917
Barley, bushels .....	123,800	144,546	2,402	6
Rye, bushels .....	66,716	37,294	14,531	9,258
Timothy Seed, bags .....	11,356	5,761	1,646	2,984
Clover Seed, bags .....	7,491	4,566	3,916	1,530
Other Grass Seed, bags ..	11,585	13,796	9,251	9,084
Hay, tons .....	11,275	12,872	3,956	7,216
Flour, bbls. ....	271,307	195,983	211,830	156,107

**CLEVELAND**—Reported by F. A. Scott, secretary of the Chamber of Commerce.

Wheat, bushels .....	314,316	212,938	104,015	89,753
Corn, bushels .....	472,045	683,936	274,099	421,163
Oats, bushels .....	609,781	720,607	274,621	272,287
Barley, bushels .....	8,512	15,312	2,262	8,006
Rye, bushels .....	893	1,450	.....	32,910
Flax Seed, bushels .....	50,750	.....	.....	128,000
Hay, tons .....	6,821	4,557	544	397
Flour, bbls .....	7,525	5,546	2,014	1,896



## ELEVATOR AND GRAIN NEWS

### ILLINOIS.

An elevator is being completed at Minert, Ill.

An elevator is nearing completion at Hendryx, Ill.

A. Fisher of LaBelle, Ill., is building an elevator at Edina.

Conger & Sutless have completed a new elevator at Fletcher, Ill.

John Q. Puffer has completed his elevator at Chatsworth, Ill.

The new elevator at McDowell, Ill., has just been completed.

W. P. Schertz of Roanoke has purchased an elevator at McCall, Ill.

Farmers contemplate the erection of a grain elevator at Odell, Ill.

W. C. Calhoun of Franklin recently purchased the elevator at Pisgah, Ill.

Henry Schmutz has just completed his new elevator at Tremont, Ill.

John Cameron has built large corn cribs near his elevator at Elliott, Ill.

Carrington, Patten & Co.'s elevator at Glenavon, Ill., is being improved.

Otto Lane succeeds Lane & Keller in the grain business at Shumway, Ill.

Eugene Purcell, Harmon, Ill., has a new gasoline engine for elevating grain.

F. Sohler recently made some improvements on his elevator at St. Jacob, Ill.

A new elevator has been completed and put in operation at Spring Lake, Ill.

G. S. Eggleston has installed a steam engine in his elevator at Gibson City, Ill.

E. B. Armstrong has purchased J. H. Parrish's Wabash elevator at Tolono, Ill.

Gonnel Brower has succeeded the grain firm of Jacobs & Brauer at San Jose, Ill.

Wm. D. Stadel has purchased George Heidenreich's elevator at Woodbine, Ill.

An elevator is being built at a new station near Hopewell, Ill., known as Taxtown.

Ream & Kelso of Lstant, Ill., have purchased N. Eisenhauer's elevator at Dimmick, Ill.

Thomas Groom has succeeded to the grain business of W. H. Hicks & Co. at Warren, Ill.

Claudon & Son of Fairbury, Ill., began doing business in their new elevator last month.

F. L. Hough of Woodhull, Ill., has withdrawn from the grain firm of Christy & Co. at Viola.

The Farmers' Elevator at Hayes, Ill., destroyed by fire last month, will probably be rebuilt at once.

The Hazenwinkle Grain Co. handled 37 carloads of oats and corn at Heyworth, Ill., during October.

Seward & Robinson, Victoria, Ill., have dissolved, but Mr. Seward continues to buy grain at the Haines elevator.

C. R. Aden of Carlinville, Ill., has increased the capacity of his elevator 3,000 bushels by the addition of three bins.

James Mahan has improved his elevator at Mansfield, Ill., by putting in a cement basement, enlarging the dumps, etc.

C. M. Dauberman, Mansfield, Ill., is replacing the steam engine in his elevator with a 14-horsepower gasoline engine.

John C. Koch, who sold his elevator at Danforth last summer, has purchased a 30,000-bushel elevator at Potomac, Ill.

A Dr. Johnston recently completed the delivery of nearly 15,000 bushels of old corn to the Hazenwinkle Grain Co. at Hudson, Ill.

The Hazenwinkle Grain Co. have purchased W. B. Probasco's corn cribs at Hendryx, Ill. They have been moved and new ones are being built.

A. D. Derrough of Urbana, Ill., has sold his grain, coal and implement business at Mahomet to Albert W. Heinz of Pesotum. E. E. Derrough has been

managing the business for his father. Possession will be given on January 1.

F. A. Edmonds and J. J. Hewitt have purchased J. Rodearmal & Co.'s elevator at Forreston, Ill.

The Pratt-Baxter Grain Co. of Taylorville, Ill., has transferred to Hill Bros. & Crow of Blue Mound its elevators at Stonington, Willey and Raymond.

Reports of officers at the recent annual meeting of the Farmers' Elevator Co. at Leonard, Ill., showed its business to be in a flourishing condition.

C. M. Bullitt & Co. of Henderson, Ky., are now owners of the Henderson elevator at Grayville, Ill., which will continue to be managed by Barnes & Williams.

Rapp & Trobie, grain dealers at Harness, Ill., are using a portable dump and elevator for cribbing ear corn and it is said to be popular with the farmers.

The Farmers' Elevator Company, Athens, Ill., have contracted with the Younglove & Boggess Company of Mason City, Iowa, for the erection of their new elevator.

M. K. Hammond's new 40,000-bushel elevator at Stockton, Ill., took in its first grain on November 25. It is a fine modern plant and is operated under the charge of J. W. Tucker.

Mueller & Young Grain Co. of Chicago, have installed in their new cleaning house a number of the largest sized oat clippers and separators made by the Barnard & Leas Mfg. Co.

The stockholders of the Howard Grain, Mercantile and Elevator Co. held a meeting at Howard, Ill., December 11, and voted to increase their capital stock from \$5,000 to \$11,000.

The Gilmore & Easterly Co., Chicago, has been incorporated with a capital of \$10,000 to deal in grain and fuel. The incorporators are Thomas W. Gilmore, J. M. Easterly and H. C. Easterly.

J. F. Leising & Co., Chicago Heights, Ill., now have their new elevator fully equipped with modern machinery which is operated by an electric motor. It has capacity for 12,000 bushels.

The Northwestern Grain & Livestock Co., Seatonville, Ill., has incorporated with a capital stock of \$10,000. The incorporated names are Ferdinand L. Hamer, John G. Wilson and Wm. S. Wolfer.

The Atwood Grain and Coal Co., of Atwood, Ill., has been incorporated with \$4,500 to deal in grain, fuel and building material. The incorporators are I. L. Storey, C. M. Harschbarger and Emery Moore.

It is reported that a company is to be organized and known as the National Cereal Co. to erect a large elevator and plant near Peoria, Ill. The company will make use of a new method of extracting corn oil.

Suffern, Hunt & Co., Decatur, Ill., are improving their mill and elevator property. The elevator capacity has been increased 30,000 bushels and the erection of six storage tanks is contemplated, giving 300,000 bushels additional capacity.

C. H. Albers recently contracted for the erection of a 100,000-bushel elevator at Denverside, just outside of East St. Louis, Ill. It will be completed about February 1. It will be known as the Terminal Elevator and operated as a private house.

### EASTERN.

W. W. Viles has a new grain storehouse at Still River, Mass.

A. H. Reynolds has completed a new grain warehouse at Essex, Conn.

Frank Palmer & Son are building a grain elevator and storehouse at Apalachin, N. Y.

The grain firm of B. J. Burns & Co., Buffalo, N. Y., has been succeeded by Burns Bros.

W. N. Lemen contemplates rebuilding his burned grain elevator at Shepherdstown, W. Va.

Ralph E. Cook has opened a store at Wellfleet, Mass., for the sale of grain, hay and feed.

M. M. Libby, West Poland, Me., has a new grain warehouse for use in connection with his store.

J. E. Robbins, Stoughton, Mass., has added the handling of grain to his hay, straw and ice business.

Lansing W. Lane will enter into partnership with Warren H. Hamilton in the grain business at Chicopee, Mass.

T. B. Chase & Co. of New York City have incorporated with a capital stock of \$20,000 to deal in flour, feed and grain.

Munroe Goodwin has engaged in the grain and feed business at Springvale, Me. His building has capacity for eight carloads of grain and the ele-

vating and feed grinding machinery is operated by a 15-horsepower gasoline engine.

U. G. Harding will engage in the grain and feed business with his brother Fred at Livermore Falls, Vt., about January 1.

The Dull Mercantile Company, Myersdale, Pa., are building a storehouse for grain, flour and feed. It is 25 feet square, three stories high.

R. J. O'Brien & Bros. Co., Passaic, N. J., has been incorporated with a capital stock of \$100,000 to deal in grain, coal, wood and building material.

L. H. Tourtelotte has purchased the grain business of Dadum & Steel at Marlboro, Mass., which until recently had been carried on for many years by F. J. Hastings & Co.

Chas. P. Washburn has just completed an elevator at Middleboro, Mass., which has bin capacity for 40,000 bushels and storage room for 30 cars of sacked grain or feed. It has handling capacity for 5,000 bushels per day. The machinery is operated by a 34-horsepower gasoline engine. The plant is managed by Daniel G. Jay, Jr.

Geo. M. Moulton & Co. of Chicago have prepared plans for a grain elevator for the Pennsylvania Railroad at Germantown Junction, Philadelphia. It will be of brick, measuring 126 by 70 feet, and 163 feet high. It will have frontages on Park avenue and Clearfield street. There will also be a one-story brick power house 31.10 by 59 feet, with a stack 162 feet high, a sheller house 30 by 14 feet, and an office 16 by 12 feet.

Bosworth & Wood have completed an elevator on Lancaster street, Fitchburg, Mass., that in point of equipment and convenience is not excelled by any elevator in New England. It is built on a diamond-shaped piece of land and is connected to the N. Y., N. H. & H. by a spur track. On one side of the elevator is a long storehouse for flour, hay, etc., while on the other side are the stables, wagon sheds, etc. The equipment includes an Eureka Grain Cleaner and a 10-horsepower gasoline engine.

Frank Lenahan, of 57 Fulton street, Buffalo, N. Y., has purchased of the New York Central the old transfer elevator standing on the Western Transit Line property in Ganson street, opposite the City Elevator, at the entrance to the company's canal slip. The contract provides for the demolition of the building before March 1 next. This old elevator was, at the time of the Civil War, an active piece of property. It had no storage capacity, but was capable of elevating 5,000 bushels of grain an hour for transfer from lake vessels to canal boats. It was purchased with the adjacent property on that side of the creek by the New York Central, in 1880, and the elevator has never turned a wheel since.

### IOWA.

Walford, Iowa, has two new grain elevators.

An elevator at Kirkman, Iowa, is being moved.

George Sims has sold his elevator at Portsmouth, Iowa.

An elevator is in process of construction at Hutchins, Iowa.

Work is being pushed on a new elevator at Stockport, Iowa.

The Nye-Schneider-Fowler Co. are erecting an elevator at Carroll, Iowa.

The Northern Grain Company is erecting an elevator at Toledo, Iowa.

W. D. Paton has succeeded Paton Bros., grain dealers at Milford, Iowa.

The Iowa Elevator Co. is rebuilding its burned elevator at Oelwein, Iowa.

Inglis & Reade have succeeded Inglis Bros. in the grain business at Wyoming, Iowa.

The Wells-Hord Grain Co. have added a new coal shed to their elevator at Beaman, Iowa.

Bryant & Sons have closed their elevator at Popejoy, Iowa, on account of lack of grain.

W. E. Marvin, Oxford, Iowa, recently added a grain cleaner to his elevator equipment.

Martin Jansses of Cleves, Iowa, has equipped his elevator with an Improved Hall Distributor.

An elevator is being built at Nevada, Iowa, near the Des Moines, Iowa Falls & Northern depot.

Beckman & Schroeder, grain dealers at Emmettsburg, Iowa, have sold out their implement business.

Martin Janssen is making extensive improvements on the interior of his elevator at Cleves, Iowa.

B. C. Ragan, who recently sold his elevators at Elliott and Stennett, Iowa, has moved to Coin, Iowa, where Harry Ragan has taken charge of an



elevator. E. H. Van Schoiack purchased the above elevators.

The Atlas Grain Co. of Chicago has been licensed to do business in Iowa with a capital of \$20,000.

C. C. Buck of Toledo has purchased C. L. Kinney's elevator and lumber business at Hubbard, Iowa.

The C. & N. W. Ry. Co. has completed a new elevator at LeGrand, Iowa. It is operated by G. L. Bowen.

J. A. & W. Ketchum have succeeded to the general store and grain business of Hardie & Ketchum at Raleigh, Iowa.

The B. A. Lockwood Grain Co. of Des Moines will probably replace their burned elevator at Ames, Iowa, with a new one.

Ed Snyder and Ellis Brewer have formed a partnership for the purpose of buying grain and livestock at Stanhope, Iowa.

The Des Moines Elevator Co. is completing an elevator at Avoca, Iowa, which replaces one destroyed by fire last summer.

W. A. Whiting of Roscoe, Ill., has purchased the old Blair Elevator at Washington, Iowa, and will move there about January 1.

Richardson & Co. will soon have ready for operation their new elevator at Fort Madison, Iowa. C. A. Johnson is the local manager.

Clarence Howell has purchased the grain elevator and residence of John Carden at Rose Hill, Iowa, putting in his farm in the deal.

C. B. Nance of Colon, Neb., has succeeded Mrs. E. A. Crawford as local manager of the Kinsella Grain Company's interests at Hedrick, Iowa. Mrs. Crawford continues her flour and feed business.

The Neola Elevator Co. of Chicago has purchased Pease Bros.' line of fourteen elevators along the Storm Lake and Des Moines branch of the Milwaukee Railroad. They will confine their business to the line of the Chicago-Great Western Ry.

#### SOUTHERN.

The Henderson Elevator Co., Henderson, Ky., completed its new elevator last month.

Richardson & Co.'s 100,000-bushel elevator at Gainesville, Texas, is nearing completion.

T. H. Bunch, Little Rock, Ark., has installed a corn sheller and cleaner, furnished by the Barnard & Leas Manufacturing Company.

The Marshall Mill & Elevator Co., Marshall, Okla., has been incorporated with a capital stock of \$10,000, by W. L. and R. I. Retta.

H. T. Foster has succeeded Viohl & Foster in the grain and feed business at Charleston, S. C. Henry Viohl opened up a similar business on December 1 in partnership with Geo. Bulwinkle.

The J. Rosenbaum Grain Company of Chicago has leased the Southern Pacific's new million-bushel elevator at Galveston, Texas. It will probably be placed in operation about January 1.

The loss on the elevator of the Model Mill at Nashville, Tenn., has been adjusted, the companies allowing \$25,000 for a total loss and taking the salvage. The damaged wheat was sold for \$5,005.

The Farmers Coöperative Union of America has been incorporated at Guthrie, Okla., with a capital of \$100,000. Its object is to buy and handle grain and other farm products. Its headquarters are at Warika, Okla.

#### WISCONSIN.

The new elevator at Caryville, Wis., is reported to be doing a rushing business.

F. E. Tanner is building a grain warehouse in connection with his mill at Melrose, Wis.

L. O. Overby of Taylor, Wis., is converting his warehouse into an elevator and feed mill, to be operated by a gasoline engine.

The new owners of the W. A. Thomas flour mill at North Bend, Wis., are building a large grain elevator in connection with the plant.

The contractors who are erecting the grain, flour and feed warehouse at Milwaukee for Chapin & Co. expect to have it completed some time in February.

I. L. Alsbacher of Mauston, Wis., purchased as salvage from the ruins of the Mauston Milling Co.'s plant, 10,000 bushels of various kinds of grain and 75 tons of mill feed. These he has dried and is selling as feed to the farmers.

R. F. Allen and E. DeCew of Fond du Lac, Wis., have organized the firm of Allen & DeCew, which will deal in flour, grain, hay, feed, etc., and do custom feed grinding. The feed grinding business will be conducted in a canning factory building,

while the grain business will be done through the Tibbitts Elevator.

The Treleven Elevator at Fond du Lac, Wis., operated by the Northern Grain Co., is being remodeled to give additional bin room for 8,000 bushels.

The Northern Grain Co. have remodeled their elevator at Cedar Grove, Wis., increasing its capacity and installing a 26-horsepower gasoline engine to operate the feed mill. A smaller engine is used for elevating the grain.

#### WESTERN.

G. A. Vawter has just erected a grain warehouse at Newport, Wash.

W. H. Brown has succeeded L. H. Park & Co., dealers in feed, etc., at Baker City, Ore.

J. B. Stevens & Co., grain and feed dealers at Tacoma, Wash., have incorporated with a capital stock of \$25,000.

Sacked wheat in warehouse at Palouse country points was worth 60 cents a bushel at Colfax, Wash., on December 1.

The Sprague Roller Mills Co., Sprague, Wash., have erected a steel tank 55 feet high for the storage of about 60,000 bushels of wheat.

Robert Liles and John C. Foster have formed a partnership under the name of the R. B. Liles Grain Co. at Colorado Springs, Colo.

The Wasbington Water Power Co., Spokane, Wash., has contracted for the erection of a 35,000-bushel elevator to take the place of one recently destroyed by fire.

It is reported that the Vollmer-Clearwater Grain Co. and the Kettenbach Grain Co. will each erect a grain warehouse at the upper terminus of the tramway owned and operated by the Farmers' Tramway Co. near Nez Perce, Idaho.

The grain receipts at Tacoma for the month of November were 1,537 cars of wheat, 70 cars of oats and 24 cars of barley. The total so far this season is 5,804 cars of wheat, or 5,318,486 bushels; 147 cars of oats, or 211,680 bushels; 297 cars of barley, or 329,000 bushels. The total gain over last year is 483 cars of wheat.

The receipt in Seattle a couple of weeks ago of 25 carloads of wheat from South Dakota and Minnesota was something of a novelty in the movement of wheat. The price of wheat on Puget Sound as compared with Chicago in connection with the value of the hard wheat as a milling blend made the shipment possible and not unlikely to be followed by others.

#### OHIO, INDIANA AND MICHIGAN.

The new grain elevator at Radnor, Ind., is now in operation.

Geiger & Deck have sold out their grain business at Hudson, Ind.

The Amanda Milling Company, Amanda, Ohio, has leased the Balthaser Elevator.

Bales & Ashbrooke have succeeded J. F. Bales in the grain business at Circleville, O.

The Hammond Elevator Co., Hammond, Ind., opened its new elevator last month.

O. H. Davis recently sold his elevator at Marshfield, Ind., to F. S. Davis of East Lynn, Ill.

Jones & Jones, Mt. Sterling, Ohio, have installed new boilers in the engine room of their elevator.

Lee & Poole of McCaysburg, Jasper Co., Ind., are building a new elevator of 30,000 bushels' capacity.

Cary Jackson, a grain dealer at Falmouth, Ind., reports a theft of \$600 worth of cloverseed from his warehouse.

D. G. McFadden has erected a building near the A. & W. track in Savannab, Ohio, and will engage in the grain and coal business.

The Smith Milling Co., Gas City, Ind., have added new machinery to their elevator to enable them to properly handle the new corn crop.

N. W. Clark has purchased and torn down the elevator at Plainwell, Mich., which stood between the railroad tracks on Bridge street.

A 10,000-bushel grain elevator was among the improvements recently added to the distillery of Wire, Welsh & Co. at New Middletown, O.

The Union Elevator Co., New Richmond, Ind., has been organized by farmers. They expect within a short time to erect an elevator and feed mill.

Marvin Moon, a grain and implement dealer of Lakeville, Ind., recently disappeared leaving no clew to his whereabouts. The safe was found rifled and the same night one of the buildings was

destroyed by fire. He was associated with his father in numerous business enterprises and was regarded as trustworthy.

The Crabbs-Reynolds-Bell Grain Co. have erected a temporary elevator at LaFayette, Ind. They expect in the spring to build a large permanent structure.

Sheriff-elect W. S. Reece of North Baltimore, Ohio, has sold his grain elevator to S. D. Nigh, preparatory to moving to Bowling Green the first of the new year, when he will enter upon the duties of sheriff.

#### MISSOURI, KANSAS AND NEBRASKA.

The Duff Grain Company has a new elevator at Cullom, Neb.

The Wright Grain Company, St. Louis, Mo., has been dissolved.

E. D. Foster has made extensive repairs on his elevator at Bertrand, Neb.

The Duff Grain Company are completing a new elevator at Orcaopolis, Neb.

The Sears Grain Company have just completed an elevator at Central City, Neb.

J. M. Irving has a new elevator at LaPlata, Mo. Its equipment includes a corn sheller.

Brownfield & Son have succeeded Smith & Brownfield, grain dealers at Pilot Grove, Mo.

W. H. Calloway has succeeded to the grain business of J. A. Ayers at Greenleaf, Kan.

The Farmers' Grain & Stock Company, Fremont, Neb., is putting up a large lumber shed.

The Bartling Grain Company are installing new machinery in their elevator at St. Joseph, Mo.

The Torpin Grain Company has installed a larger gasoline engine in its elevator at Fremont, Neb.

Savage, Wiles & Co. have engaged in buying corn at Laclede, Mo. They will also deal in real estate.

A. F. Abernathy has purchased the Worth Elevator at Scottsville, Kan. He is an experienced buyer.

The R. K. Johnson Co., grain dealers at Valparaiso, Neb., have disposed of their general store business.

The Updike Grain Company of Omaha will install an Improved Hall Distributor in their new elevator at Anoka, Neb.

The People's Elevator Company, Butler, Mo., have installed a corn sheller and cleaner of the Barnard & Leas make.

The Omaha Elevator Company have completed elevators at Cozad and Darr, Neb., and are now building one at Agnew.

The Omaha Elevator Company's office at Platte Center, Neb., was visited by burglars recently but it yielded them no cash.

Wells, Abbott & Neiman have placed an order for an Improved Hall Distributor for their new elevator at Primrose, Neb.

T. B. Hord has installed a corn sheller and cleaner at Neligh, Neb., purchased from the Barnard & Leas Manufacturing Company.

Crew & Whaley, millers at Shelbina, Mo., have erected a 10,000-bushel elevator which they have equipped with corn sheller, etc.

Richard Heinen of Germantown recently purchased David Black's elevator at Spring Branch, Neb. He is also buying live stock.

D. R. Hopkins has a new elevator at Wilber, Neb., with bin room for 40,000 bushels and crib room for 30,000 bushels of ear corn.

The new elevator at South Omaha, Neb., owned by the Union Stock Yards Company will be equipped with an Improved Hall Distributor.

The Farmers' Elevator Company, Thayer, Neb., began shipping grain last month. They have no railroad switch as yet but haul grain to the cars.

Hathaway & Keath, dealers in grain and seeds at Mexico, Mo., have enlarged their building and installed new machinery, including a gasoline engine.

G. W. Reed and A. Pierce, dealers in grain and coal at Albany, Mo., have dissolved partnership. We understand Mr. Pierce will continue the business.

The Ewart-Wilkinson Grain Company, Lincoln, Neb., has been incorporated with a capital stock of \$60,000 by J. S. Ewart, R. Wilkinson and L. R. Ewart.

The Armstrong Mill & Elevator Company of Armstrong, Mo., is building a corn mill with a capacity of 15,000 bushels per hour in connection with its plant. This is one of the first corn mills to be built in that territory. The machinery is being fur-



nished by the Great Western Manufacturing Company of Leavenworth, Kan.

Mr. Sweiter, a farmer near Wichita, Kan., has erected a 12,000-bushel elevator on his farm for his own convenience. It has all modern labor-saving features.

The Moore Grain & Elevator Company of Kansas City, Mo., has settled with its creditors at 45 cents on the dollar and is arranging to resume business.

Van Buskirk & McMahon have repaired their elevator at Dalton, Mo., and enlarged the building, giving it a shelling capacity of 500 bushels of corn per hour.

The Duff Grain Company has established an agency at Plattsmouth, Neb., with George E. Sayles in charge. Mr. Sayles will also have charge of the elevators at Oreapolis, Cullom and South Bend.

The Des Moines Elevator Company formally opened its new elevator at Moberly, Mo., on December 4 in the presence of a large number of grain men who were entertained in the evening by the Commercial Club.

Fennelley, Fox & Co., grain dealers at Kansas City and New Orleans, failed last month after being in business less than a year. Their liabilities were not heavy and a settlement was effected with the creditors.

The Farmers' Coöperative Grain Association of Kansas held its annual meeting in Topeka the first of the month. A board of directors was elected and an increase of the capital stock from \$20,000 to \$200,000 voted for.

The Midland Elevator Company have erected an 8,000-bushel corn crib at Kansas Falls, Kan., on the Union Pacific between Champman and Junction City. A great many cribs are being put in that part of the state but most of the corn will be used for feeding.

Duff & Co., owners of the upper elevator at Table Rock, Neb., recently sold out to the Hays-Eamers Grain Company of Hastings, and they in turn made an exchange with C. R. Smith, who owned the elevator near the depot. This will be converted into a steam elevator. C. R. Smith in turn took the upper elevator which was much more convenient for him to operate in connection with his lumber and coal business up town.

J. H. Rogge, Bird Critchfield and G. M. Hague have purchased an elevator at Rokeby, Neb., the first station south of Lincoln on the Rock Island, and have formed a company to be known as the Rokeby Lumber & Grain Company. They expect to put in a complete stock of lumber, lime, coal, brick, etc., and will carry on a general lumber business in addition to the grain business. Mr. Hague has been installed as manager.

#### NORTH DAKOTA.

H. C. Kimball has built a new grain office at Park River, N. D.

The Dakota Elevator at Fessenden, N. D., has been completed.

Thos. Lahart has closed his elevator at Donnybrook, N. D., for the season.

Dennis O'Connell has finished buying grain at Denhoff, N. D., for this season.

R. A. Grams of Stewart, Minn., has purchased an elevator at Bowbells, N. D., and has installed a buyer there.

Portable elevators are said to be largely used in the smaller towns of North Dakota where the capacity of the regular elevators is limited.

Dunbar Bros. have completed an elevator 30x30 at Souris, N. D. This makes the seventh elevator in Souris, besides three flat houses and numerous grain buyers on the track.

O. A. Kneeland, a grain buyer of Sabin, Minn., was robbed of \$355 one night recently. The thief raised a window near the head of the bed and drew out Mr. Kneeland's vest without awakening him.

The stockholders of the Devil's Lake Grain & Shipping Company held their annual meeting at Garske, N. D., last month. Joseph Kelly is president and John W. Maher secretary and treasurer.

#### SOUTH DAKOTA.

The Sullivan Lumber Co. has a new elevator at Sisseton, S. D.

John Coffey recently purchased an elevator at Flandreau, S. D.

The Farmers' Elevator Co., Astoria, S. D., are installing a feed mill.

The Updike Grain Co. of Omaha, Neb., have placed an order for an Improved Hall Distributor

to be placed in their new elevator at Bonesteel, S. D.

In one day last month it is said that 65 carloads of wheat were shipped from Alexandria, S. D.

G. H. Perry of Sioux Falls, S. D., will erect an elevator, lumber yard and coal sheds at Rowena.

E. C. Nelson, agent at the Kansas City elevator at Viborg, S. D., has rebuilt the corn crib which blew down last June.

The Sioux Elevator Co. are pushing work on their new elevator at Vermillion, S. D. The Milwaukee road is extending its switch track to accommodate the new building.

At a recent meeting of the board of directors of the Farmers' Elevator Co., Hartford, S. D., a Thanksgiving offering of \$10 was voted to the Children's Home at Sioux Falls.

J. J. Mullaney has disposed of his elevator business at Beresford, S. D., to the Northern Grain Company of Chicago, which now has 150 elevators under its control. Peter Riley, who was employed by the former owner, has been engaged to manage the business.

Eureka, South Dakota, which has heretofore been considered the greatest primary wheat buying and shipping point in the country, is likely to lose its laurels. The extension of the Milwaukee road from that point to Linton, N. D., adds several new shipping points to a territory for which Eureka was heretofore the only market.

#### MINNESOTA.

An elevator is nearing completion at Hadler's Siding, Minn.

A new mill and elevator are nearing completion at Ceylon, Minn.

Tucker & Co., Bay City, Minn., have rented M. Dossdall's elevator.

Chas. Schleicher has erected an elevator 32x32 feet at Millville, Minn.

Frid. Wurst is now doing business in his new elevator at Torah, Minn.

Work has been started on the Sheffield Elevator at Lesueur Center, Minn.

The Peavey cleaning elevator at Kasota, Minn., was completed last month.

The Farmers' Elevator Co., Ada, Minn., are completing an addition to their elevator.

A. Stanison & Co., Becker, Minn., have put their elevator into shape for buying grain.

H. N. Babcock has built a feed mill in connection with his elevator at Cleveland, Minn.

J. McRoberts has a new grain office and engine room for his elevator at Ellsworth, Minn.

R. Smith & Co., Carleton, Minn., are completing an addition to their elevator and feed mill.

The Western Elevator Co. recently made improvements on their property at Anderson, Minn.

The Monarch Elevator Co. are converting their elevator at Brainerd, Minn., into an elevator.

P. E. Lundquist is operating a feed mill in connection with the elevator at Willmar, Minn.

The first brick building in Morris, Minn., is the two-story brick engine house for the new elevator.

The Thorpe Elevator Co. have erected a coal shed near their elevator at Ada, Minn., and will handle coal.

The new elevator at Elko, Minn., is now taking in grain. This is a new town on the St. P. & M. R. R.

A new engine house is being built at the Peavey Elevator, Elmore, Minn., and other improvements made.

Some of the elevators at Alexandria, Minn., were compelled to shut down lately because of a scarcity of cars.

The Farmers' Mercantile & Elevator Co. of St. Vincent, Minn., have built a coal shed and will handle fuel.

The Farmers' Elevator at Pine Island, Minn., has been moved to a new site on the Great Western right-of-way.

The farmers have organized an elevator company at Lafayette, Minn. J. K. Peterson is president and P. A. Retrum, secretary.

A bond of \$30,000 has been given at the customs house, Minneapolis, by the Great Eastern Elevator Company of Minneapolis for the storage of Canadian oats. The grain will be ground into oatmeal

in some mill yet to be designated, and used entirely for export business.

The Dakota Elevator Company has completed an addition to its elevator at Hitterdal, Minn. John Fridlund is the local agent.

Patrick Heily has purchased the Farmers' Elevator at Graceville, Minn., and the affairs of the farmers' company will be wound up.

W. A. Forsaith of Hadley, Minn., recently installed in his elevator a No. 4 Monitor Grain Separator and an 8 horsepower gasoline engine.

The Concrete Elevator Company of Minneapolis has filed a \$100,000 trust deed to secure an issue of bonds for that amount to be used in enlarging its plant.

The Red Lake Falls Milling Company, Red Lake Falls, Minn., has purchased cribbing which it will use in the construction of a 75,000-bushel elevator next summer.

Booge & Co. have closed their grain commission office at Hutchinson, Minn., and C. S. Treadway will go on the road for them in Minnesota and South Dakota.

Jameson, Hevener & Co., general commission merchants of St. Paul, Minn., are completing a grain elevator on Chicago Ave., near the Great Western tracks.

Sage Bros. of Currie, Minn., have purchased a 60,000-bushel elevator at Mountain Lake which they will use as a cleaning house, under the management of S. B. Sage.

The Empire Roller Mill Co., New Ulm, Minn., are having a 50,000-bushel elevator built by the W. S. Cleveland Elevator Building Co. of Minneapolis. It is located on a spur of the M. & St. L.

The Western Elevator Co. recently completed material improvements in their elevator at Lysne, Minn. New dump scales were put in, a new driveway built and a new cupola and grain elevating machinery added.

The Huhn Elevator Co. of Minneapolis has purchased a piece of land having a track frontage of 1,500 feet, opposite their present elevator plant. They will probably hold this for future enlargement of their plant.

F. P. Seeger of Marietta, Minn., made an assignment last month, naming A. C. Miller as assignee. Mr. Seeger bought and shipped practically all products of the farm and sold general merchandise, fuel, implements, etc. His elevator was said to be full of grain at the time of his assignment, and his liabilities to aggregate about \$40,000.

The North Star Grain Company has been organized at Springfield, Minn., with an authorized capital of \$150,000 to handle grain and later perhaps to go into the milling business. Wm. A. Anderson is president; Geo. W. Somerville, chairman of the board of directors; H. R. Soot, vice-president; Walter M. Blackmun, secretary; K. E. Mo, treasurer. They will at once erect 25 elevators in Canada.

#### CANADIAN.

H. F. Hall is erecting a 30,000-bushel elevator at Crandall, Man.

Wight & Esdaile, grain dealers at Montreal, have dissolved partnership.

The Ogilvie Milling Co. have completed their big oats elevator at Winnipeg.

A farmers' organization is being perfected for the purpose of erecting an elevator at Clearwater, Man.

Knowlton & Pibus, grain, flour and feed merchants at Knowlton, Que., have dissolved partnership.

L. A. Tilly has opened an office at Montreal in the interests of the Independent Grain Co. of Winnipeg.

The Altamont Farmers' Elevator Company, Ltd., Altamont, Man., has been incorporated with a capital stock of \$5,000.

The Renfrew Roller Mills, Renfrew, Ont., are erecting a large flour mill and a 50,000-bushel elevator in connection therewith.

The Fort William and Port Arthur grain and elevator men will hold their third annual banquet at the Queen's Hotel on December 16.

The Royal Mail Steamer Miowera left Vancouver, B. C., on November 16 with a shipment of 50 tons of oats. This is the first shipment of the kind and if it proves successful other cargoes will likely follow.

The H. D. Metcalf Co. has been incorporated with a capital of \$100,000 to deal in grains and cereals of every description and in hay and agricultural products generally, and to build and operate wharves, elevators and vessels. Henry Duncan



Metcalf, Charles Popple Metcalf, John English Riley, James Johnstone Riley and Henry H. Snowdon, all of Montreal, are named as incorporators.

Vigars & Co. of Port Arthur, Ont., have secured the contract for rebuilding the dock in front of the new Canadian Pacific's Elevator E at Fort William and also in front of the old steel Elevator D. The docks will be 9 feet wide between elevator and river.

Being assured by the officials of the Canadian Northern Railroad that the company would be able to move all grain offered it before the close of navigation the grain dealers of Winnipeg on November 12 advanced the price of wheat at all C. N. points 6 cents per bushel.

The total elevator accommodation in Manitoba and the Northwest Territories and at Fort William and Port Arthur, Ont., available for storage when the new grain began to come in was: Elevators on C. P. R. lines, 16,000,000 bushels; elevators on C. N. R. lines, 3,000,000 bushels; C. P. R. elevators at Fort William, 4,000,000 bushels; C. N. R. elevator at Port Arthur, 1,500,000 bushels; total, 24,500,000 bushels. In addition, the C. P. R. will have ready this month a 3,500,000-bushel annex to Elevator D. at Fort William; later on the C. N. R. 2,500,000-bushel addition to its Port Arthur elevator will be completed, and in February a 2,000,000-bushel addition to C. P. R. Elevator B at Fort William is to be opened. This will increase the total storage capacity to 32,500,000 bushels.

## SEEDS

It is reported that a receiver has been appointed for the Vail Seed Co., of Indianapolis.

The Winona Seed Co. has built an office in connection with its elevator at Winona, Minn.

Landreth & Sons, seedmen, are said to instruct retailers to destroy all unsold seeds at the end of each season.

A carload of seed corn received at Elk Point, S. D., from McCook county, that state, was sold at 50 to 60 cents a bushel.

The instructors of the Iowa Agricultural College have issued a circular instructing farmers in the proper method of storing seed corn.

C. A. King & Co. say October exports of clover seed were large, numbering about 15,000 bags and including both alsike and red clover.

The Excelsior Seed Farm of Cheraw, S. C., has been chartered with a capital stock of \$10,000. C. F. Moore is president and W. F. Stevenson secretary.

J. F. Zahm & Co. report receipts of clover seed at Toledo this year as 58,890 bags, as compared with 80,861 last season; 45,107 two seasons ago; 94,625 three seasons ago; 46,344 four seasons ago and 126,620 five seasons ago. The shipments this season amounted to 10,832 bags, as compared with 32,340 last season; 32,454 two seasons ago; 64,982 three seasons ago; 15,967 four seasons ago and 39,496 five seasons ago.

The Orange Judd Farmer says the yield of clover seed varies sharply from year to year, yet, realizing the possibility of crop failure due to drouth or winterkilling, the details of the last federal census are remarkable. According to the returns now available for all of the United States, the total output of clover seed in 1899 was 1,349,209 bushels, average value per bushel \$3.97, against 2,753,180 bushels ten years ago. Iowa is credited with only 15,000 bushels in 1899, against 219,000 bushels in 1889, and Illinois 98,000 bushels, against four times that much a decade ago. The smallness of the Michigan crop, or possibly a failure to secure a proper "count," is shown in the returns of only 68,000 bushels in 1899, against 427,000 bushels in 1889. Comparative figures from the federal census are shown in the accompanying table relating to states of chief production; others making up the totals cover a large number of states of minor importance.

(In round thousands.)

	Bushels.	Value.
	1899.	1889.
United States	1,349	2,753
Indiana	472	481
Ohio	336	636
Illinois	98	376
Wisconsin	91	181
Michigan	68	427
Missouri	59	94
Iowa	15	219
		1899.
		\$5,360
		1,764
		1,359
		376
		392
		291
		221
		70

## CROP REPORTS

Weather conditions in Texas are said to be right for wheat.

Reports of rust and fly in Kansas wheat are causing some alarm.

The Michigan state report for December makes the condition of wheat 88, against 82 a year ago.

Nebraska corn is yielding better than anticipated early in the season and the quality is excellent.

Kentucky has harvested a good crop of corn this year. A large acreage of winter wheat has been sown.

The average yield of corn in South Dakota this year is 17.5 bushels per acre, against 21 last year and a ten-year average of 21.3.

The condition of growing wheat in Ohio shows an improvement of 3 per cent over last month. The damage by the fly is not serious.

Seasonable rains are reported from California. Plowing is under way and general satisfaction is expressed at the prospect for a wet year.

State Grain Inspector Arrasmith of Washington has increased his estimate of the state's wheat crop from 18,000,000 to 24,000,000 bushels.

Returns to the Orange Judd Farmer at the end of November place the total area of winter wheat in states east of the Rocky Mountains at 27,516,000 acres.

J. R. Sage, head of the Iowa weather and crop bureau, in making his final report on corn will make an effort to determine how much of the crop is marketable.

Owing to bad weather the greater portion of the 1903 wheat crop in some sections of Oregon will not be sown until after the first of the year and will virtually be spring wheat.

The summary of the Kansas State Board of Agriculture for the year 1902, which was issued November 21, says the corn area of 6,990,764 acres (which includes the 5,919,590 acres reported by assessors, plus 1,071,174 acres of plowed-up wheat land stated by correspondents as having been planted in corn) yielded 201,367,102 bushels, worth \$78,321,653.26. The yield of oats is nearly 60 per cent greater than last year's, or 32,966,114 bushels, and the largest since 1892.

Iowa grain men say the government report on the corn crop of the state is useless as far as they are concerned. The report shows that the yield will be 32 bushels to the acre, indicating a crop of 278,156,000 bushels. The grain men say that while the yield may be 32 bushels to the acre, the corn is largely green and will shrink 16 to 18 per cent in drying and that not over 40 per cent of the Iowa corn is marketable. In the northern part of the state there is practically no sound corn.

E. J. Smiley, secretary of the Kansas State Grain Dealers' Association, takes exceptions to the figures which Secretary F. D. Coburn of the Kansas board of agriculture has given out in regard to the grain yield for the past year. He maintains that there were not over 40,000,000 bushels of wheat raised in the state, instead of 54,000,000, Mr. Coburn's estimate, but says that the latter's figures on corn, 200,000,000 bushels, are practically correct. Mr. Smiley estimates the winter wheat area of the state at 6,250,000 acres.

The official estimate recently issued by the provincial department of agriculture places the total yield of all grains in Manitoba at 100,052,343 bushels. A feature of the report is the heavy increase in the yield of oats. In 1901 the yield totaled 27,796,588 bushels, with an average yield an acre of 40.3 bushels. This year the yield was 3,478,160 bushels, with an average yield of 47.5 bushels. The acreage under crop increased from 689,951 in 1901 to 725,060 in 1902. Flax shows the largest percentage of increase of any of the grains, the yield for this year totaling 564,440 bushels, against 266,420 last year. On the other hand, the acreage yield is but little larger than 1901.

According to the government report issued December 10 the winter wheat area is estimated at about 34,000,000 acres, or 5.1 per cent greater than the area estimated to have been sown in the fall of 1901. The condition of winter wheat on December 1 was 99.7, compared with 86.7 in 1901 and a nine-year average of 91.4. This estimate would suggest a total winter wheat yield of 560,000,000 bushels, but these figures do not mean anything unless the crop escapes all the perils of the next six months. The winter rye area is estimated at 99.3 per cent of the area sown in the fall of 1901. The condi-

tion December 1 was 98.1, compared with 89.9 December 1, 1901, and an average of 95.7 for the past nine years.

Indiana's corn crop, which is now in shock and crib, is the largest in the history of the state. The crop is reported at 175,886,000 bushels, or 88,403,000 greater than last year's crop, and 22,665,000 bushels greater than any previous crop of the state. Early sown wheat is reported damaged by fly, but the later sown has not been seriously injured.

The Ohio report, issued December 1, says the area of corn is slightly in excess of the area planted last year. The total production as estimated for this year is very greatly in excess of last year's product. The quality of this year's corn crop does not compare favorably with a good average quality. There was a great deal of soft and moldy corn, necessitating very careful sorting for the crib. The percentage of imperfect corn will reduce, by several millions of bushels, the total that can be graded as sound and merchantable. The following shows the yield and disposition of the crop: Area planted in 1902 as returned by township assessors, 3,171,810 acres; average yield per acre, 37.3 bushels; total estimated product for 1902, 118,418,321 bushels; put into silo, 2 per cent; average date cribbing began, October 24.

The Illinois weather report of December 1 says in part: "Wheat is reported to be in exceptionally fine condition in the northern half of the state and in fair condition in the southern. The acreage was greatly reduced in the northern and central districts, due, correspondents state, partly to fear of Hessian fly, but mostly to the delay in plowing and seeding caused by unusually wet weather in the fall. In the southern portion of the state the early sown wheat is injured to a considerable extent by the Hessian fly and in some counties by rust. The rains of the latter part of the month, however, seemed to have checked the ravages of the fly, and since the rains occurred there has been no apparent increase in the number of fields where rust has appeared. Late sown wheat has suffered little injury and its condition is promising. The acreage in the southern portion of the state is about an average. The work of securing the corn crop is still in progress, but nearing completion, and favorable reports as to the yield and quality continue. Some of the ears are still soft and some fodder is too damp to shred, while further slight injury from molding and growing in shock is reported in some parts of the northern and central districts."

## THE EXCHANGES

Corwin H. Spencer of St. Louis has applied for membership in the Chicago Board of Trade.

The suggestion that a market in linseed oil futures be established by the Minneapolis Chamber of Commerce is said to be receiving some consideration.

The auction for choice of sample drawers went off quietly this year on the Milwaukee Chamber of Commerce. The selections were all made for same positions as occupied last year.

President Macgill has appointed Messrs. Blanchard Randall, Joseph R. Foarde and Henry G. Hilken to represent the Baltimore Chamber of Commerce at the meeting of the National Board of Trade to be held at Washington on January 13 next. Mr. Randall is president of the National Board.

Secretary M. D. Stevens of the Mutual Benefit Association of the Chicago Board of Trade makes the most remarkable exhibit of no death among the 816 insured members for a period of six months. In that time thirty-one new members, of average age of 34 years, were added to the association.

The Grain Committee of the Cincinnati Chamber of Commerce, C. S. McGuire, chairman, has passed a rule permitting grain men to secure samples from the inspector at any hour in the day he might see fit to give them out, but prohibiting their display on 'change before the regular hour. In this way no one dealer can secure an advantage over any other. Samples secured during the forenoon can only be used in the office of the firm securing them.

Wheat reached the record price for four years at San Francisco on November 24, 1.43½ per cental being the top. This is equal to 86.175 cents per bushel. While prices have been very high on the

The Philippine government by the purchase of 20,000 tons of Indian rice and its sale at Manila at cost has broken a rice corner ran by the regular dealers. The supply was short, and this government importation gives the native dealers a sufficient supply at a reasonable rate.



## BARLEY AND MALT

Toronto grain dealers are said to have joined hands with the malsters and brewers to defeat a referendum vote on prohibition.

Although the barley acreage in the Gallatin Valley of Montana was not up to average this year, the yield per acre and the quality of the grain were both up to the average.

Application was made recently for the removal of John C. Osterhout as receiver for the Galland-Henning Pneumatic Malting and Drum Co., of Buffalo. The concern failed about six years ago.

Albert Schwill & Co. have taken out a permit to build a malting plant at South Chicago. The structure is to cost \$100,000 and will consist of a two-story part 144x116 feet, and a three-story part 88x144 feet.

The Whatcom Brewing and Malting Co., of Whatcom, Wash., has elected the following officers for the ensuing year: Adam Spenger, president; O. L. Swanson, vice-president; Thomas Linn, secretary, and Frank Borgeson, treasurer.

Herman Goepper & Co.'s malthouse No. 5, Cincinnati, was destroyed by fire on the morning of November 22. The north end of the building was blown out by an explosion in one of the malt bins. The loss is placed at \$61,000 and the insurance at \$35,000.

The report of the San Francisco Merchants Exchange states that on December 1 there were 20,424 tons of barley at Port Costa, compared with 35,302 tons on December 1, 1901; 8,738 tons at Stockton, compared with 15,386 tons the year before and 7,361 tons at San Francisco, compared with 3,213 tons the year before.

The report of the Cincinnati Chamber of Commerce for the month of November shows that the receipts of barley at that point were 123,800 bushels, compared with 144,546 bushels for the same month last year and that shipments were 2,402 bushels, compared with 6 bushels last year. The receipts of malt for November were 82,778 bushels, compared with 87,106 bushels last year. The shipments of malt were 33,312 bushels, compared with 54,098 bushels last year.

According to the Insurance Press insurance companies are getting fearful of malt houses in Cincinnati, basing their judgment on past experiences on this class of risks, and claiming that the rates are inadequate and below safe underwriting, and that the advance ought to be made immediately or the 80 per cent co-insurance clause insisted upon. There are some brewers who have grown wise by experience and are centering their heavy insurance on their malt departments, while the other parts of the plant are neglected.

The Kentucky Malt and Grain Co. of Louisville, Ky., has increased its capital stock from \$50,000 to \$150,000. Of the new stock \$65,000 is to be issued at once for the following purposes: \$13,500 to be issued to Frank Fehr, trustee, and other owners of an undivided one-fifth interest in the property now occupied by the company, and \$13,500 to Frank Senn and Philip Ackermann, who also own a one-third interest in the property; the remainder, \$38,000, is to be issued to the present stockholders in proportion to their present holdings.

The American Malting Co. has been reorganized and officers have been elected as follows: Charles A. Stadler, president; Frederick Uhlmann, vice-president; Louis L. Stanton, treasurer; H. Eggerkin, assistant treasurer, and F. D. S. Bethune, secretary. It has been officially stated that the reorganization was accomplished by reducing the capital stock of the company from \$28,940,000 to \$15,000,000. It has also been decided to retire \$256,000 of underlying bonds and to continue the policy of selling property that is not of actual use to the company, thereby liquidating a part of the assets for the purpose of increasing the working capital.

### IMPORTS AND EXPORTS OF BARLEY AND MALT.

BARLEY.			
Imports—	Bushels.	Value.	
October, 1901 .....	31,140	\$ 17,438	
October, 1902 .....	21,272	12,642	
Ten mo. end. October, 1901...	36,639	19,992	
Ten mo. end. October, 1902...	26,605	15,783	
Exports—			
October, 1901 .....	1,807,946	796,216	
October, 1902 .....	916,098	506,897	
Ten mo. end. October, 1901...	6,215,924	2,788,054	
Ten mo. end. October, 1902...	6,591,014	3,417,670	

### BARLEY AND MALT.

Imports—			
October, 1901 .....	.....	.....	.....
October, 1902 .....	.....	.....	.....
Ten mo. end. October, 1901...	2,866	2,774	
Ten mo. end. October, 1902...	3,086	3,588	

Exports—			
October, 1901 .....	29,011	19,782	
October, 1902 .....	30,631	21,575	
Ten mo. end. October, 1901...	317,258	214,916	
Ten mo. end. October, 1902...	347,729	235,529	

## FOREIGN NEWS

France has 43 starch factories using India rice and American corn.

England's wheat receipts since August 1 have been the largest on record.

Finland, owing to short crop, will admit corn free of duty until June 1 next.

The late winter in the Argentine was one of the severest known for many years.

South Russian railways are blockaded with grain and other freight as badly as any part of the United States.

John Martin has been appointed successor of the late John MacDougall as secretary of the Glasgow Corn Trade Association.

At Limerick, Ireland, a law court awarded a workman a judgment for damages of 32s 6d (\$7.80) for life. The plaintiff was a dock laborer injured while unloading grain for certain millers.

Owing to the drought the wheat harvest of New South Wales is estimated to be short 11,000,000 bushels, which is not very far from a total loss. Victoria expects to harvest not over 4,000,000 bushels, against a fair crop of 15,000,000 bushels.

After wheat, oats are Belgium's largest cereal crop. The grain is protected by a duty of 54 cents per 100 kilos (220.46 pounds). The price is usually higher than that of wheat. In August last the difference was as much as 7f (\$1.34) per 220.46 pounds.

The official Russian estimate of the 1902 crops in European Russia, the Baltic Provinces and the Caucasus is as follows: Rye, 22,444,283 tons; wheat—winter, 5,703,983 tons; spring, 7,774,733 tons; oats, 12,939,150 tons; barley, 6,608,316 tons; millet, 2,609,750 tons. The crop in European Russia is considered to be "above the middle average."

The Odessa Bourse committee, to whom the Russian finance minister recommended the policies of the grain trade of South Russia to prevent continuance of the scandalous adulteration of export grain, say they do not see how the Bourse can assume such a responsibility, and recommend that European buyers should deal only with exporters known to be honest.

The government of the Argentine has signed a contract for the improvement of the port of Rosario on a vast scale. In order to carry out the plans, it will be necessary to remove all the existing shipping slips and grain warehouses along the barranca, at a great loss to the grain exporters. All private wharves also are to be destroyed and without compensation to the owners. It is predicted that the "improvements" are destined to kill the port by saddling it with a "white elephant" whose keep will make the harbor too expensive for merchants to use.

The chief statistician of the Argentine Department of Agriculture reports that the net areas sown to wheat and flax for the crop now ready that will be harvested both show an increase over last year—of wheat, 33,575 hectares (82,954 acres) and of flax, 172,993 hectares (429,466 acres). This gives for the four provinces a total of 3,254,641 hectares (8,042,218 acres) to wheat and 955,873 hectares (2,326,962 acres) to flax. The flax area has increased over 300 per cent in the past five years. The wheat area, however, has increased only about 0.7 per cent in the same period.

The right of the London corporation to collect dues (equal to a little less than one-eleventh of a cent per hundredweight) on all grain brought into the city, expired by limitation on October 31 last. In 1872 the London Corporation and the British government compromised the ancient right of the Corporation to levy metage dues on terms to abolish the right at the end of thirty years, the money received during that period to be expended for maintaining certain open spaces or small parks within the city of London. The gross income from grain by the Corporation last year was about \$100,000.

## FLAXSEED

C. C. Hart is baling flax fibre at La Moure, N. D., and shipping it to a tow mill.

It is stated that the Ontario Linseed Co. is preparing to build a large plant at Owen Sound, Ont.

Argentine flax has a kernel twice as large as common flax and under similar conditions yields from five to ten bushels more per acre.

Flaxseed at Duluth has shown considerable activity, the feature of the market being the continued speculative buying on rising prices.

The capacity of the oil mills at Buffalo will be increased to 138 presses. This will increase the annual capacity to 6,000,000 bushels of flaxseed.

Exports of flax from Russia and the Danube from August 1 to November 2 amounted to 2,520,000 bushels, against 1,552,000 for the previous year and 4,664,000 in 1900.

According to the Review of the River Plate it is quite remarkable how the cultivation of linseed has increased in Argentine of recent years. This has been brought about by the low price of wheat and by the firmness in the price of linseed.

The shipments of flaxseed from India from April 1 to November 21 amounted to 11,088,000 bushels (Calcutta 7,584,000 and Bombay 3,504,000), against 12,248,000 bushels last season (Calcutta 9,080,000 and Bombay 3,168,000), and 10,056,000 bushels in 1900 (Calcutta 8,752,000 and Bombay 1,304,000).

The Duluth Commercial Record says that flax is not coming to market as rapidly as ordinarily and that not 70 per cent of the crop has been moved to terminals. The total receipts at Duluth and Minneapolis to December 1 aggregated 18,204,000, out of a crop now estimated at over 28,000,000 bushels.

Buenos Ayres Handels Zeitung of October 24 says: "The yield of the flaxseed crop in the Province of Buenos Ayres is likely to be 70,000 tons larger than last year. In Santa Fe and Cordoba, particularly the latter, the outlook is so much more satisfactory than last season as to admit of no comparison. In Entre Rios prospects are distinctly more favorable."

The Argentine flax crop is two weeks later than usual. According to the Minister of Agriculture, the area under cultivation is 2,388,000 acres, although 600,000 acres more was seeded and lost. The crop is an average one and the surplus for export will probably be larger than for some years, being variously estimated at from 17,000,000 bushels to 21,500,000 bushels.

The Duluth Commercial Record figures that 22,500,000 bushels of the present flaxseed crop has been put on the market. Of this amount export requirements will reach 3,500,000 bushels, leaving 19,000,000 bushels to be accounted for by the crusher and speculator. To this must be added 3,500,000 bushels carried over from last crop and 5,000,000 bushels to 6,000,000 still in farmers' hands.

The flaxseed crop of Manitoba and the Territories is nearly all out of farmers' hands. Single carloads are still being received from some districts, but the bulk of the crop is cleaned up. The quality of the flax has been almost uniformly good, a large proportion grading No. 1, and farmers have received from 98 cents to \$1.05 per bushel for the crop. A considerable quantity was bought for shipment east.

The following table shows the Orange Judd Farmer's final estimate of the flax acreage, yield for acre and total crop of the principal flax growing states:

	Acres.	Per Acre.	Bushels.
Wisconsin .....	47,000	11.8	554,600
Minnesota .....	667,000	10.9	7,170,300
Iowa .....	104,000	9.3	967,200
Missouri .....	61,000	6.1	372,100
Kansas .....	169,000	6.5	1,098,500
Nebraska .....	17,000	11.5	195,500
North Dakota .....	1,750,000	8.1	14,175,000
South Dakota .....	503,000	7.4	3,722,200
Idaho and Montana..	83,000	12.0	996,000
Total .....	3,401,000	8.7	29,351,400

E. C. Warner, president of the Midland Linseed Oil Co., Minneapolis, said in a recent interview: "A few years ago the great bulk of the domestic flax was raised in the states of Ohio and Illinois. Flaxseed, however, is pre-eminently the crop of the new country and gradually the crops began to be given up in the east and move westward. The natural consumption of flaxseed by the mills in this country amounts to about 21,000,000 bushels, and



this year the crop and surplus carried over will amount to about 32,000,000 bushels. This must either find a foreign outlet or else depress our market. The flax crop of Argentina, however, is the natural supply of the European countries and unless our prices fall very low we cannot expect to place over 3,000,000 or 4,000,000 bushels with them."

### THE WORLD'S CORN CROP.

The corn crop of the world in 1900, the latest year for which final quantitative estimates are available, amounted to 2,822,900,000 bushels, against 2,718,260,000 bushels in the year preceding, and 2,682,987,000 bushels in 1898.

These figures will, of course, not bear a too literal construction. They do not indicate absolutely the production of corn for the entire world, for the cultivation of this cereal is of far wider geographical distribution than is popularly appreciated. Not only is corn an article of prime agricultural and dietary importance in Central America and in countries of South America other than Argentina and Uruguay, says the Crop Reporter for April, but it is also produced as a domestic crop in India, China, the Philippines and many other more or less remote political divisions of the earth's surface from which, as has been humorously but aptly said, it is as impossible to obtain statistics of production as it is from the planet Mars. The figures do, however, cover practically all the world's crop for which statistics at all trustworthy are extant; and, from the commercial point of view, they may properly be regarded as representing the world's crop.

Of the entire production of the world in 1900, with this limitation, the United States produced 2,105,103,000 bushels, or 74.57 per cent, all other countries of the world combined contributing the comparatively small proportion of 25.43 per cent, or about 717,797,000 bushels. The preponderant importance of the United States as a corn producer is apparent; the next single country in producing importance, Austria-Hungary, raised less than 6 per cent of the world's supply; and the remaining 20 per cent, approximately, of the world's crop, outside of the United States, was distributed in varying proportions among 17 different countries.

The area devoted to this, the principal cereal crop of the United States, in 1900 was 83,320,872 acres, the largest acreage up to that date in history, being 1,212,285 acres in excess of that of 1899, the previous record year. The yield, for the sixth time only in the records of this cereal, passed the 2,000,000,000-bushel mark, that point having been first reached by the crop of 1889. The estimated value of the crop on the farm December 1, 1900, was \$751,220,034, a value greater by over \$170,000,000 than the farm value on the same date of the crops of wheat, oats, rye and barley combined. The exact exports out of any given crop cannot, of course, be ascertained. Exports, however, of corn and corn meal counted as corn for the fiscal year ending June 3, 1901, amounted to 181,405,473 bushels, valued at \$84,593,415, against 213,123,412 bushels, valued at \$87,354,810, the high-record exports of the previous year. These exports substantiate, in a general way, the commonly accepted commercial estimate that, under average conditions, approximately 90 per cent of the corn produced in the United States enters primarily into domestic consumption. And, as is well known, a very heavy proportion of the enormous quantity of corn consumed in this country never leaves the county, or even the farm, where grown. In fact, the immense economic domestic value of this crop can be appreciated only by contemplating the growth and development of the livestock industry of the United States in all its phases, especially in its manifold and essential relations to agricultural and industrial operations.

Of the comparatively scant crop of corn (717,797,000 bushels) produced in 1900 in all other countries of the world combined, the continent of Europe produced about two-thirds. As is well known, the corn-growing area of Europe is confined to the southern part of that continent—generally to the south of the 48th degree of north latitude—and, for present purposes, may be divided into three sections, of almost equal importance, one to another, as producers, Roumania, Bulgaria, Servia, and the corn-growing governments of South Russia may be conveniently grouped as constituting the section first in importance in the production of this cereal, their combined product in 1900 amounting to 178,986,000 bushels, or about 37 per cent of the European crop. To this group, it may be noted, also properly belongs Turkey, a country of considerable importance as a producer, as the names "granturco" and "blé de Turquie" (Turkish grain), by which corn is known in some European markets, would suggest, but acceptable statistics on Turkish production are not available. Austria-Hungary, including Croatia-Slavonia, may be taken as constituting a territory second in producing importance, the yield in 1900 having been 161,793,000

bushels, or almost exactly one-third of the European crop. The third group comprises Southern France, Spain, Portugal and Italy, their combined product in 1900 having been 145,518,000 bushels, or about 30 per cent of the European production. Of the three groups, only the first and second are of commercial significance as competitors of the United States in supplying the corn markets of the non-producing countries of Europe. The countries of the third group produce insufficient for domestic needs, and in general complement the home production by imports.

Of the remaining corn-growing countries of the world only two, Mexico and Argentina, produce quantities of statistical importance. The former's crop in average years just about suffices for home consumption, the imports from the United States in 1900 amounting to a little over half a million bushels. The latter is an exporter, usually exceeded in importance only by the United States.

The estimates of the United States corn crops of 1899 and 1900 are subject to revision, the report of the twelfth census, published since the foregoing statement was put in type, indicating a larger corn crop in the census year than was estimated by the Department of Agriculture.

### IT WENT AGAINST THE GRAIN.

Not since the days when manna descended from heaven and there was much corn in the wilderness has there been anything to equal the scene that yesterday presented itself at Cromwell's grain elevator in the edge of Somerville.

The story is a simple one of the freight that came through by daylight. Amid the struggling rays of early morning the elevator went up on the wings of the flying switch that brakemen tried to make. There was no bunting post, and the grist mill, 25 feet beyond, paid the penalty.

Three coal cars got going at such a pace that the wheels looked like electric fans, reached the end of the track ahead of schedule time, and from this point went as overland freight to the elevator. It was more than the mere contact of three loaded freight cars with a building.

Down through the long stretches of the carboniferous era nature had been storing up her energy to cast it against the grist mill. There was little grain in the lower story, but above the floors were filled almost to bursting.

Accordingly the cars went through into the cellar and down came the golden grain, filling all the interstices, while the roof went off on a tangent. The grain rattled like small hailstones on the windows of the houses about. Few guessed as the kernels pattered on the roofs that it was a shock of corn.

The catastrophe included 2,000 bushels of oats, 700 bushels of corn, 11 tons of shorts, three tons of meal and a little flour, besides hornets, pigeons, traces of beans, plaster, fertilizers, etc.

The wreck defies description. Only a great painter and grainer could do it justice.

The air was full of sustenance, and for a week to come people within a large radius can gaze on the flour gardens and enjoy meals at all hours.

When the proprietor arose and peeked through the shutters of his house, opposite, he felt discouraged. Things had gone against the grain.

Everything seemed blended in the prospect. The meal was mingled with the oats and would have to be sold for oatmeal. The cracked corn had run into the shorts and was not what it was cracked up to be. The water on the ground had made hasty pudding of the unbolted meal. The black oats and the white oats were deftly intermingled, ignoring color lines.

The only way was to screen out the coal and then the grains, one by one, in sifters of different warps. The safe was buried in the ruins.

But a winter's stock of coal was in the cellar, suddenly transformed into a coal pocket.

Even Cereus, who commonly rejoices over the sowing of the seed, could not smile—the case was too Cereous.—Ex.

### OUR CALLERS

[We have received calls from the following gentlemen prominently connected with the grain and elevator interests, during the month.]

F. Riddell, DeKalb, Ill.  
Jno. F. Pritsch, Palatine, Ill.  
C. H. Lindner, Valparaiso, Ind.  
W. J. Fender, representing Richmond Mfg. Co., Lockport, N. Y.  
O. J. Edwards, representing The Foss Mfg. Co., Springfield, Ohio.  
F. Lehmann, representing Nordyke & Marmon Co., Indianapolis, Ind.

### OBITUARY

F. Decray, a hay and grain merchant of Montreal, Que., is reported deceased.

Ira Stiles, a grain buyer of Whitman county, Wash., died at Colfax, that state, recently.

D. C. Fairbank, who had been an extensive grain and stock dealer of Dodge Center, Minn., died November 20.

Morgan C. King, a member of the grain and lumber firm of King & Hudspeth, Hondo, Texas, died November 8 of typhoid fever.

George McBean, of A. G. McBean & Co., grain dealers of Montreal, Que., died suddenly November 22. He was 42 years old and unmarried.

Dennis J. Kennedy, formerly a confidential member of the late St. Louis grain firm of T. B. Caruthers & Co., died November 13, aged 46 years. He leaves a widow and two daughters.

Robert Ernest Wight of the grain firm of Wight & Esdaile, Montreal, Que., died November 9, aged 43 years. He had been ill for a long time, but continued to take an active part in the business of his firm up to within a short time of his death. He leaves a widow and five children.

Richard Randle, a retired grain commission merchant of Baltimore, died at his home in that city November 27. Mr. Randle, who was born in Virginia, located in Baltimore when but fifteen years old. He was for a number of years in the grain business, retiring about fifteen years ago. He leaves a son and daughter.

George M. Hood, for ten years a member of the Chicago Board of Trade, died November 17, aged 69. He was born in Maysville, Ky., and was for many years a member of the Merchants' Exchange of Cincinnati. He located in Chicago about twenty years ago and engaged in the grain business, but of late years had been in the real estate business. He is survived by a widow, two sons and a daughter.

Thomas H. Bellas, who was formerly an active member of the Chicago Board of Trade, died of heart failure November 29. Mr. Bellas was a native of Ireland and came to Chicago late in the 70's. He was employed by J. L. Fisher & Co. as an expert bookkeeper and later became a member of the firm of Eldridge & Bellas. He was also at one time with Murry Nelson and went with Alexander Geddes when the latter took charge of the cash end of the Leiter wheat deal.

John A. Robinson of the Kansas City grain exporting firm of Hall & Robinson, died at his home in that city November 23 of Bright's disease, aged 55 years. He was a native of New York City and received his early training in the grain business under his father in the East. In 1883 he became associated with Herbert F. Hall, and they soon engaged in the export trade at Kansas City. Mr. Robinson is survived by a widow and four children. The Kansas City Board of Trade adopted appropriate resolutions on his death November 24.

Belden F. Culver of Chicago died at Asheville, N. C., November 13, after an illness lasting more than two years. Mr. Culver was born in New York in 1829 and removed to Chicago in 1855, establishing the grain commission house of Culver & Co., the firm consisting of himself and brother. He retired from the firm in 1870 and later joined the Board of Trade. He was for several years president of the Lincoln Park Board. He was also president of the board of trustees of the town of Lake View for two years and held the office of state warehouse registrar for three years. He was a member of the Chicago Academy of Design. Mr. Culver was best known as one of the founders of the Illinois Humane Society. He was 73 years old.

Lester R. Brooks, a prominent grain and lumber merchant of Minneapolis and formerly president of the Minneapolis Chamber of Commerce, died from a stroke of apoplexy November 11. For some months Mr. Brooks had been in poor health, but his condition had not been considered serious and the announcement of his death came as a shock to his friends and business associates. Mr. Brooks was born in Redfield, N. Y., in 1847 and went to Minneapolis in 1872. He engaged in the banking business but later gave this up and became interested in grain and lumber. At the time of his death he was a member of the Brooks-Griffith Grain Co., Brooks Bros., grain and lumber, the Brooks-Scanlon Lumber Co. and the Scanlon-Gipson Lumber Co. He was chairman of the construction committee of the new Chamber of Commerce building, but had completed his work on this committee before he died. It is believed that he left an estate valued at a million dollars.



## FIRES--CASUALTIES

A fire in the elevator at Broadlands, Ill., recently, was discovered and put out without loss.

The hay and grain warehouse of P. F. Smith at Wallace, Idaho, was slightly damaged by fire recently.

Ritchie's elevator and mill at Strathcona, Alberta, was damaged to the extent of \$4,000 by fire, November 26.

Griffith's Elevator at Charleston, Ill., caught fire recently, but the blaze was extinguished before any serious damage was done.

The Allen & Eminger grain warehouse at Dayton, Ohio, was badly damaged November 27 as a result of the walls falling.

Hancock, Minn., was visited by fire December 2. An entire block, including the grain and land office of E. A. Dutcher, was burned.

Fire in the office of the Peavey Elevator at Lake Wilson, Minn., November 17, was put out by the aid of hand grenades and buckets.

The old Glasco grain warehouse at Hamilton, Ont., was damaged by fire December 3. The principal loss was on the grain stored therein.

Erne's portable elevator at Goodrich, N. D., was damaged to the extent of \$250 by fire November 14. It was caused by the explosion of a gasoline engine.

An overheated furnace in the basement of the elevator at the C. H. & D. Railroad crossing near W. Fifth street, Cincinnati, caused a fire November 13. The loss was slight.

The elevator and hay barn of C. F. Davison at Bluffton, Ind., was destroyed by fire December 5. The fire started in the boiler room. The loss is \$3,500; insurance \$1,500.

Robert Watke, a scoop shoveler, who is charged with having set fire to the elevators which were recently burned at Ashton, Neb., has been arrested and is held in \$5,000 bonds.

A seven-year-old boy who was playing in the elevator of J. C. Todd at Goodwood, Ont., November 15, fell into a bin of rye and was almost smothered before he could be rescued.

A bucket brigade saved the St. Anthony and Dakota Elevator at Hillsboro, N. D., from destruction by fire November 22. The fire started in the top of the house and was a hard one to fight.

The elevator of the Hayes-Eames Elevator Co., at Shickley, Neb., was burned December 4. The house contained considerable grain and the loss is \$5,000. The fire originated in the engine house.

A passing locomotive started a fire in the grain storage house of W. W. Copeland & Co. at North Hanson, Mass., November 23. The railroad men extinguished the blaze before it gained any headway.

Harry Ross, an employe of the Farmers' Elevator at Kincardine, Ont., was found dead November 14. He was alone in the elevator and is supposed to have fallen into the grain where he was smothered.

Three attempts have been made recently to burn Elevator B of the Niagara Elevator Co. at Buffalo. The third effort was made December 1 and was frustrated by the watchman, who extinguished the blaze.

The elevator, feed mill and other property of the Appleton Flour, Fuel and Feed Co. at Appleton, Minn., was destroyed by fire November 9. Loss, \$4,000; insurance, \$1,500. M. Dalrymple was proprietor.

Morgan Bros.' grain warehouse at Hamilton, Ont., burned December 3. Although the flames had a good start when the firemen arrived they were confined to the ground floor and the loss will not exceed \$1,100.

Leaking gasoline caused a small fire in the Loftus & Hubbard Elevator at Stillwater, Minn., November 12. Manager M. H. Allen promptly extinguished the blaze and averted what promised to be a bad fire.

Fire at Hayes, Ill., November 13 destroyed the elevators of the Farmers' Elevator Company and R. & J. Ervin. The former house contained 15,000 bushels of grain and the latter 5,000 bushels. The fire was discovered in the Farmers' Elevator about

10 o'clock p. m. and spread to the Ervin house. The loss to the Farmers' company is \$6,500, fully insured, and that of the Ervins is \$800, also fully insured.

The Duluth Elevator Co.'s house at Buxton, N. D., was burned November 23. The fire broke out at daybreak from an unknown cause. The elevator contained between 3,000 and 4,000 bushels of grain and was totally destroyed.

W. N. Lemen's elevator at Shepherdstown, W. Va., containing about 3,500 bushels of wheat, corn, oats and millfeed, was entirely destroyed by fire November 10. The loss is estimated at \$5,000, with insurance of \$4,000. The cause of the fire is unknown.

An attempt was made recently to burn the Ogdensburg Terminal Co.'s million-bushel elevator at Ogdensburg, N. Y. Oil-soaked waste upon which lighted matches had been dropped was discovered in a remote part of the building. A former employe has been arrested.

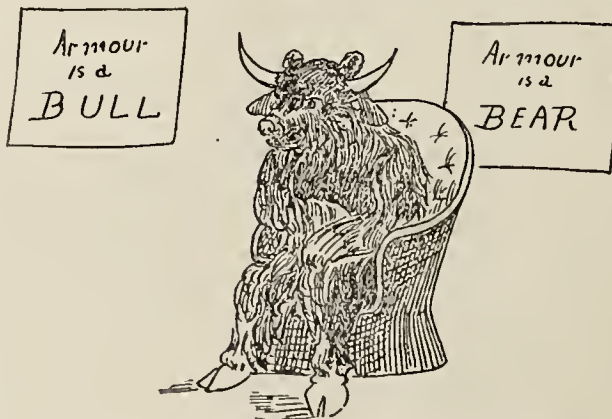
An attempt was made to fire Nutt Bros.' elevator at Urbana, Ohio, November 8, by piling boards and waste against the house and setting fire to the mass. A railroad detective discovered the burning pile and extinguished it before the elevator caught. Later a man who is believed to have been the incendiary was arrested.

When the steamer Syracuse arrived at Buffalo November 13 with a cargo of grain she was found to be on fire and although fire tugs soon got control of the blaze about 15,000 bushels of corn was badly damaged. The fire was discovered in the No. 4 compartment. Investigation disclosed a ship's lantern buried in the grain, where it is supposed to have been left by careless grain trimmers.

The B. C. Thomas Elevator at Columbus, Ind., was damaged by fire November 28 to the extent of about \$18,000. The fire started in the top of the building and was due to friction. The blaze was confined to the part of the elevator in which it originated and a large part of the loss is from water. The machinery was damaged to the extent of \$6,000 and the loss on the grain is estimated at \$12,000, both fully covered by insurance. The damage to the elevator has been repaired.

The elevator at Highland, Ill., owned by the Farmers' Mutual Benefit Association, was burned December 1. When the fire was discovered, at 10 o'clock a. m., the entire upper story of the building was a mass of flames. The fire department responded promptly, but could do nothing to save the house. It contained 11,000 bushels of grain and Manager A. Labbart estimated the loss at \$16,000, against which there is insurance of \$12,000. The elevator was originally built in 1877 and had been enlarged and improved a number of times. It will probably be rebuilt.

The elevator at Royal Center, Ind., owned by the Royal Center Elevator Company, was burned December 4. The house was a new one, having been built last year at a cost of over \$5,000, and contained about \$2,000 worth of grain. The structure was insured for \$4,000 and the contents for \$1,000. The fire was discovered at 4 o'clock a. m. and was first seen in the cupola. During the progress of the fire the company's safe fell in such a manner that the doors opened and the contents fell out, the books being burned. The Royal Elevator Co. is composed of W. E. Hurd of Logansport, J. M. Enyart of Galveston and S. W. Smeltser of Royal Center. An elevator which formerly occupied the site of the burned structure and which was owned by Messrs. Hurd and Enyart, was destroyed by fire last year. Mr. Hurd writes us that the Millers' Mutual Insurance Co. of Chicago satisfactorily adjusted the loss on the burned building December 5, thirty-six hours after the fire.



IS IT ARMOUR—A BULL OR A BEAR?

It is as difficult to answer this by the above picture (which is part bull and part bear), as it is to tell whether Armour really is one or the other.—Zahm's Circular.

## COMMISSION

G. L. Graham & Co. of St. Louis, Mo., have engaged O. J. Wooldridge to represent them in Missouri territory.

The Gordon Commission Co. has incorporated at Winnipeg, Man., to succeed Buchanan & Gordon. The capital stock is \$10,000.

The interest of the late Mr. Wright in the Chicago commission firm of Nash, Wright & Co. is said to have been taken by Charles H. Lester.

William A. Otis & Co. have transferred their business to Otis & Hough, with offices in Denver and Colorado Springs, Colo., and Cleveland, Ohio.

Arthur R. Sawers will spend the winter months at El Paso, Tex., where he has assumed the management of the J. Rosenbaum Grain Co., Rock Island and Elevator.

Alfred O. Brown and Edward F. Buchanan have formed a partnership under the firm name of A. O. Brown & Co. and will do a general commission business in New York City.

Howard A. Hill and James O. Monroe commenced business December 1 as grain commission merchants in the Wheeler building, Chicago, under the firm name of Hill & Monroe.

I. G. Andrews & Co., grain and stock commission, Minneapolis, have retired and I. G. Andrews and Herbert MacNamee of the firm will represent the Weare Commission Co. of Chicago in Minneapolis.

L. G. Squire, A. R. Luken and H. F. Squire are members of the new Chicago grain commission firm of Squire & Luken. All of the members of the new firm have been with H. J. Norton, who has retired from business.

Articles of incorporation have been filed by the Gilmore & Easterly Company of Chicago, to do a grain and fuel business. The capital stock is \$10,000 and the incorporators are Thomas W. Gilmore, J. M. Esterly and H. C. Esterly.

Articles of incorporation have been filed by the New York Stock and Grain Company, of New York City, with a capital stock of \$100,000. The directors are C. A. Mittelberger, Brooklyn; Herschel Rhine, Philadelphia, and F. W. Cushing, New York.

Fennelly, Fox & Co., members of the Kansas City Board of Trade, were suspended recently for failure to meet obligations. The house was a branch of a New Orleans concern and the failure is said to be a reflection of that of the Odendahl Co. of New Orleans.

Denniston & Gillett is the style of a new grain firm that will commence business in Chicago January 1. Mr. Denniston has been Chicago manager for McIntyre, Marshall & Co., of New York, and Mr. Gillett has been interested in the firm of C. H. Canby & Co.

C. H. Spencer of St. Louis has been elected a member of the Chicago Board of Trade and in connection with A. R. Denniston of C. H. Canby & Co. will open a new commission house in Chicago, January 1. Mr. Spencer will reside in St. Louis to look after the firm's interests at that point.

A new grain commission firm has commenced business at 47 Produce Exchange, Toledo, under the firm name of Worts & Emmick. William R. Worts of the new firm was for ten years with Paddock, Hodge & Co. and later with Churchill & Co., and Arthur B. Emmick was formerly with Paddock, Hodge & Co. and later with the Travis-Emmick Co. The new firm commenced business December 1.

Henry J. Norton, trading as Norton & Switzer, grain commission, Chicago, has retired from business for a period of six months. Mr. Norton is one of the oldest members of the Board of Trade, having been head of the firm of Norton-Worthington for years. On the death of Mr. Worthington the house became Norton & Switzer. The latter retired from the business a few years ago, when Mr. Norton assumed full control.

C. A. May, secretary of the South Minnesota and South Dakota Grain Dealers' Association, has issued a statement to the members of that association in which he says that the firm of Nichols & Taylor, of Minneapolis, have satisfied the officers of the association that the recent letter sent out by the firm was not intended to reflect upon other institutions or their methods and that in future the firm will work in harmony with the association.

Indianapolis speculators claim to have made a "pot of money" out of the recent bulge in December corn.



## HAY AND STRAW

The semi-annual meeting of the Michigan Hay Dealers' will be held at Saginaw, Mich., December 30.

Hunter Bros. are reported to have sold their hay and wood business at Spokane, Wash., to A. L. Johnson.

The Forney Hay Co. of Forney, Tex., has been granted a charter. The capital stock is \$25,000 and the incorporators are Henry F. Ring, John H. Ruby and John Lovejoy.

The McCausland Co. of Old Town, Me., has been organized with a capital of \$10,000 to deal in hay, straw, etc. The officers are: President, Geo. H. Hunt; treasurer, N. C. McCausland.

The annual meeting of the Kansas City Hay Dealers' Association was held December 4. All the old officers were re-elected as follows: B. F. Tyler, president; J. A. Stahl, vice-president; J. W. Lowe, secretary and Bert Sheldon, treasurer.

At a meeting of a number of Chicago hay and straw receivers held November 20 to discuss a proposition to change the rules by raising the commission from 50 cents to 75 cents a ton no action was taken because of the differences of opinion.

The Pennsylvania Railroad Company has placed a temporary embargo on hay and straw and receipts at Pittsburg are consequently light. The bulk of the shipments are over Pennsylvania lines from the west and the action of the railroad company has seriously affected receipts.

In tests made in Michigan very dry timothy hay put into the mow June 17 lost 7 per cent in weight in six months. In other instances timothy lost 13, 15 and 22 per cent during storage. Early cut timothy has been known to lose as high as 29 per cent between autumn and spring.

The grades of the National Hay Association for hay and straw have been adopted by the following exchanges: Brooklyn, Baltimore, Buffalo, Chicago, Cincinnati, Cleveland, Columbus, Indianapolis, Kansas City, Louisville, New Orleans, Norfolk, Philadelphia, Pittsburg, Richmond, St. Louis, St. Paul, Toledo and Washington.

The receipts of hay at San Francisco for the last week in November were 1,800 tons, as compared with 3,050 tons for the corresponding week last year. Warehouses are practically empty and the shortage of cars still continues. Reports from Stockton are to the effect that quite a little hay is being shipped along the Sacramento river and there are numerous inquiries for hay from interior points.

The export hay trade of the United States has steadily increased as improved methods of packing and handling have been developed. The amount sent abroad during the ten years ending with 1881 was 80,751 tons, which has increased during the ten years ending with 1891 to 183,728 tons. During the next decade this was increased to 599,383 tons, making a total of 863,862 tons exported during the past thirty years.

The semi-annual meeting of the Michigan Hay Dealers' Association will be held at Saginaw, Mich., December 30. The following papers will be delivered: "Trade Organizations and Their Benefits," Chas. England, Baltimore, Md.; "Standard Bales," Smith Young, Lansing; "Terminal Warehouses," Geo. S. Bridge, Chicago; "Local Inspection of Hay at Shipping Point," Albert Todd, Owosso; "Shippers and Receivers," Geo. T. McComb, Lockport, N. Y.

The order of the Interstate Commerce Commission in the case of the National Hay Association versus the L. S. & M. S. Ry. et al has been issued and provides that the defendant corporations shall, on or before December 1, 1902, desist from classifying hay and straw in car loads under fifth class rates, and further that hay and straw shall hereafter be classified in car loads as sixth class freight, the order to become effective December 1, 1902.

### REVIEW OF THE CHICAGO HAY MARKET.

The prices ruling for hay in the Chicago market during the past four weeks, according to the Daily Trade Bulletin, were as follows:

During the week ending November 15 sales of Choice Timothy ranged at \$12.75@13.00; No. 1, \$11.75@12.50; No. 2, \$10.75@11.50; Not Graded, \$6.50@11.50; Choice Prairie, \$12.00@12.50; No. 1, \$10.50@11.50; No. 2, \$10.00; No. 3, \$8.50; No. 4, \$7.00@7.50; Not Graded, \$8.00@11.50. Rye Straw sold at \$6.50@8.50, Wheat Straw at \$5.50 and Oat Straw at \$5.00. The receipts for the week were 3,199 tons, against 4,089 tons for the previous week.

Shipments for the week were 146 tons, against 207 tons for the previous week. The offerings of Choice Timothy were small and a good demand existed. Low grades were in liberal supply and dull. Prairie Hay ruled firm during the week.

During the week ending November 22 sales of Choice Timothy ranged at \$12.50@13.50; No. 1, \$11.50@12.75; No. 2, \$11.00@11.50; No. 3, 9.00@11.00; Not Graded, \$8.00@12.50; Choice Prairie, \$12.00@13.00; No. 1, \$11.00@12.00; No. 2, \$10.00; No. 3, \$9.00@9.25; Not Graded, \$9.50@12.00. Rye Straw sold at \$6.50@8.00. The receipts for the week were 2,992 tons, against 3,199 tons for the previous week. Shipments for the week were 216 tons, against 146 tons for the previous week. The demand for Timothy Hay was good throughout the week with a very fair demand for Prairie Hay.

During the week ending November 29 sales of Choice Timothy ranged at \$13.50@14.00; No. 1, \$12.50@13.50; No. 2, \$10.50@12.00; No. 3, \$9.00; Not Graded, \$8.50@12.50; Choice Prairie, \$12.00@12.50; No. 1, \$11.00@12.25; No. 2, \$10.50; No. 3, \$8.00@9.00; No. 4, \$7.00. Not Graded, \$9.50@12.00. Rye Straw sold at \$7.00@7.25 and Wheat Straw at \$6.00. The receipts for the week were 3,393 tons, against 2,992 tons for the previous week. Shipments for the week were 147 tons, against 216 tons for the previous week. A good demand existed for all grades of Timothy Hay and consignments sold readily. Prairie Hay was quiet and steady throughout the week.

During the week ending December 6 sales of Choice Timothy ranged at \$13.00@14.00; No. 1, \$12.00@13.00; No. 2, \$11.00@11.50; No. 3, \$9.00; Not Graded, \$9.00@12.00; Choice Prairie, \$12.00@12.50; No. 1, \$10.50@11.50; No. 3, \$8.00. Not Graded, \$7.50@8.50 for State and \$10.00@12.00 for Kansas. Rye Straw sold at \$7.00@7.50. The receipts for the week were 4,614 tons, against 3,393 tons for the previous week. Shipments for the week were 212 tons, against 147 tons for the previous week. The arrivals of Timothy Hay were small and a steady feeling prevailed with no material change in prices. The offerings of Prairie Hay were liberal and the demand moderate with prices ruling steady.

### SPONTANEOUS COMBUSTION OF ALFALFA.

The frequent destruction of stacks of alfalfa hay by fire originating apparently in spontaneous combustion led the farm department of the Kansas Experiment Station to make an investigation of a number of such fires which took place during the season 1901. The results of these investigations are given in Bulletin No. 110, advance sheets of which have appeared.

A typical statement of the facts in each of half a dozen cases of fire examined into minutely would be like this:

"George Washington, Manhattan, Kan., had a rank growth of alfalfa. It was cut early in June, when half in bloom, and burned in August. The cut alfalfa laid in the swath from one to one and a half days, when it was gathered in windrows with a side delivery rake. It was allowed to remain in the swath until apparently well cured, when it was stacked, 150 tons being put in a stack. The stack settled badly in the middle and smelled hot for quite a while before it burned. Two or three days before the fire broke out a boy went on top of the stack where it had settled the most and taking a pole started to force it down through the center of the stack. The pole went through two or three feet of hay and then dropped down, the entire center of the stack apparently being burned out. Fire broke out all along the top of the stack, and no hay was saved."

From the many similar statements of the treatment of this hay, the station has formulated the following resume of the conditions favorable to spontaneous combustion:

"All cases of spontaneous combustion of alfalfa hay that have come to our notice have occurred with the first cutting. Early spring growth of alfalfa in an ordinary season is rank. The alfalfa is cut either in May or early June, and at this time of the year the weather is such that it is difficult to thoroughly cure the alfalfa without getting it wet. Usually there is considerable damp weather and little wind after the first cutting is put in the mow or stack, and this hinders further drying. With later cuttings the growth is not so rank and succulent, and the weather is dryer, and there is often wind. This makes curing easy.

"At this station we have not had alfalfa heat sufficiently to take fire, but we have had it become so hot that as a matter of safety we took it out of the barn several weeks after putting it in the mow, and stacked it out of doors. We have had so much trouble with the first crop heating that for the past four years we have stacked it out of doors and put the other cuttings in the barn. We have cured the first cutting as carefully as we knew how, keeping it several days in cocks, putting covers on the cocks at night and opening the cocks

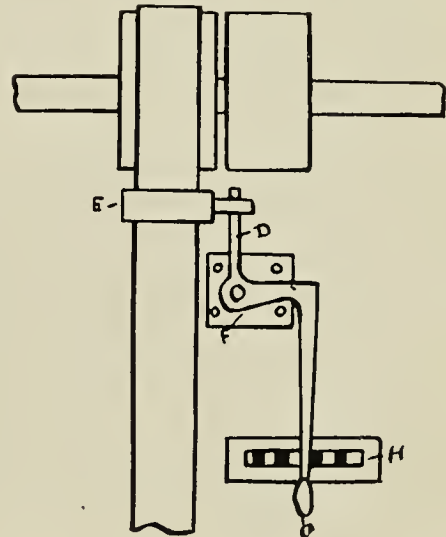
during the daytime, and with all these precautions if there came a week or more of wet, 'muggy' weather in July or August the alfalfa hay would become hot. If the weather stayed dry no heating took place. The college barn is of stone, and is well ventilated at the roof above the mows.

"In all cases of spontaneous combustion given in this bulletin the alfalfa was handled as little as possible and was turned but little. This resulted in the leaves becoming dry while the stalks contained considerable moisture. Where weather conditions were favorable this moisture in the stems was sufficient to promote fermentation, and in the cases given the fermentation generated sufficient heat to start a fire. Usually alfalfa will not get hot enough to do this, and the heating causes little damage. It is quite common to find alfalfa hay from the first cutting that is brown or black from heating, and the cattle eat it with relish."

The station recommends that alfalfa be cut when not more than one-tenth of the plants have come in bloom, and in the morning after the dew is off; that it be cured to save all the leaves possible, the leaves being the most valuable part of the plant, and that it should become so dry before stacking that "when a handful of stems are tightly twisted together no water can be squeezed out." The first crop is the only one that presents any difficulty in curing.

### BELT SHIFTERS.

If a belt is shifted by means of a stick the edges of the belt will be broken, and as the stick catches in these ragged places the openings will be enlarged until the tear extends an inch or more into the side of the leather and has to be laced. Open edges and loosened laps of this character are frequently seen in shops and mills. When a lap is torn open the stick is likely to catch in it and do considerable injury. One plan for a belt shifter of simple design, yet effective and far better than a



stick, consists of wood pins set into holes bored in a movable wood handle. The latter fits loosely in sockets made of either wood or iron and fastened to a base piece. This shifter is moved by hand.

In Fig. 1 is an improvement over the latter. The lever D can be forged and provided with a mouth-piece, E, through which the belt passes. The lever is studded at F, and therefore can be moved back and forth by means of the handle end G. There should be a notched circular piece at H to receive a corresponding catch-piece of the handle. This will hold the shifter in place after the belt is shifted.—The Tradesman.

Nebraska dealers are said to be sending more of their wheat to the Gulf ports this year than ever before.

The Lima bean is grown for home use in nearly every state in the Union, but only in California is it grown to any extent as a commercial product. In Ventura County there are said to be now between forty thousand and fifty thousand acres in Lima beans, and this is much less than in former years, owing to low prices previous to 1900, and to three seasons of drought on land not irrigated, also to land formerly in this crop now being given up to sugar beets. They do not grow them on poles, but allow them to pile up along the rows, and when they ripen in September they are harvested by sleds with knives attached to the runners, or by more modern wheel cutters. It takes from two to four weeks to cure them, and then they are put through the steam thresher, or are tramped out by horses and carts driven over them, while the vines are kept turned over and moved with pitchforks. From 1,200 to 1,500 pounds, or 200 to 250 bushels to the acre, is called a good crop in a favorable season, but 2,000 pounds per acre have been grown. The estimated yield last year was 550,000 sacks of 80 pounds each, and it is thought the crop this year will equal if not exceed that amount.



## PERSONAL

Noah Gibbons has resigned as manager of one of the elevators at Holstein, Neb.

A. J. Beier, who formerly bought grain at Fletcher, Ill., is now buying at Graymont, Ill.

C. F. Fitton has been appointed grain inspector for the Mansfield (Ohio) Chamber of Commerce.

W. M. Christenson has taken charge of the Crown Elevator Co.'s house at Stewart, Minn., as buyer.

Ole Lysgaard, who has recently been employed at the Farmers' Elevator, Alexandria, Minn., has resigned.

Andrew Davidson of Swedes Forest, Minn., has been made manager of one of the Peavey elevators in North Dakota.

G. B. M. Wischaupt, a dealer in grain, implement, at Port Royal, Pa., has been elected to the House of Representatives.

Ole Bjoin is in charge of the new elevator at La Salle, Minn., recently completed by the Eagle Roller Mill Co. of New Ulm, Minn.

J. F. McElvain, one of the employes of the Parker Grain Company, Kansas City, was married to Miss Minnie J. Geiss, December 3.

Isaac Tucker, who at one time managed the Burlington Elevator at Iowa Falls, Iowa, has been taken to an asylum for the insane.

P. H. Elcan, manager of an elevator at Kankakee, Ill., had his foot injured recently by becoming caught in a screw conveyor.

R. K. Pierson, who is connected with the Parker Grain Company of Kansas City, was married November 26 to Miss Genevieve Thomas.

Mr. McCullough, grain buyer for the M. P. Elevator at Preston, Kan., has been compelled to use a pair of crutches, owing to a sprained ankle.

L. M. Archer, who has been employed in the Cargill Elevator at Murdock, Minn., has gone to Colfax, N. D., to take charge of an elevator there.

George Hunsaker, who recently sold his flour and feed store at Jonesboro, Ill., has taken the position of foreman of Vilim Bros.' elevator at Anna, Ill.

Henry T. Gubbins, one of the official grain samplers of the Chicago Board of Trade, has been confined to his home as a result of a street car accident.

C. S. Tredway, who has represented Booge & Co. of Minneapolis at Silver Lake, Minn., has been made solicitor of grain for Minnesota and South Dakota.

Alexander Spangler, who has been in the grain business at Gettysburg, Pa., for nearly forty years, has retired, being succeeded by his son, Collin E. Spangler.

E. S. Wheeler, who has been conducting the grain business at Leverett, Iowa, since the station was established, expects to return to that place in the spring.

Fred W. Foster, who is employed in the office of the Parker Grain Company of Kansas City, was united in marriage to Miss Alvina Kleunder on December 10.

Frank Bending has taken charge of the Phoenix Grain brokerage business at Washington C. H., Ohio. He has been manager of a similar business at Jamestown, Ohio.

George F. Stone, secretary of the Chicago Board of Trade, has been elected to membership of the Royal Statistical Society of London. There have been but six Americans so honored.

R. Hulsemann has succeeded Mr. Finke in charge of the Northern Elevator Co.'s house at Welcome, Minn. The latter has taken charge of the company's elevator at Wheelerwood, Ia.

D. F. Piazzek, president of the Kemper Grain Company of Kansas City has been appointed a special police officer to aid E. W. Weeks, president of the Kansas City Humane Society.

A. B. Lewis, who has been employed by the Barnett & Record Co., of Minneapolis, since 1894, has taken a position as superintendent with the International Elevator Co., of Minneapolis.

John Schaack, trader for Irwin & Green on the Chicago Board of Trade, recently became the proud father of a son and heir and when Mr. Schaack's friends on 'Change learned of the happy event they proceeded to make things interesting for the gentleman. Not content with shouting themselves hoarse

in honor of Mr. Schaack and his new son, the frolicsome traders dispatched a messenger for a baby carriage, which was rushed past the doorkeeper and presented to the embarrassed father.

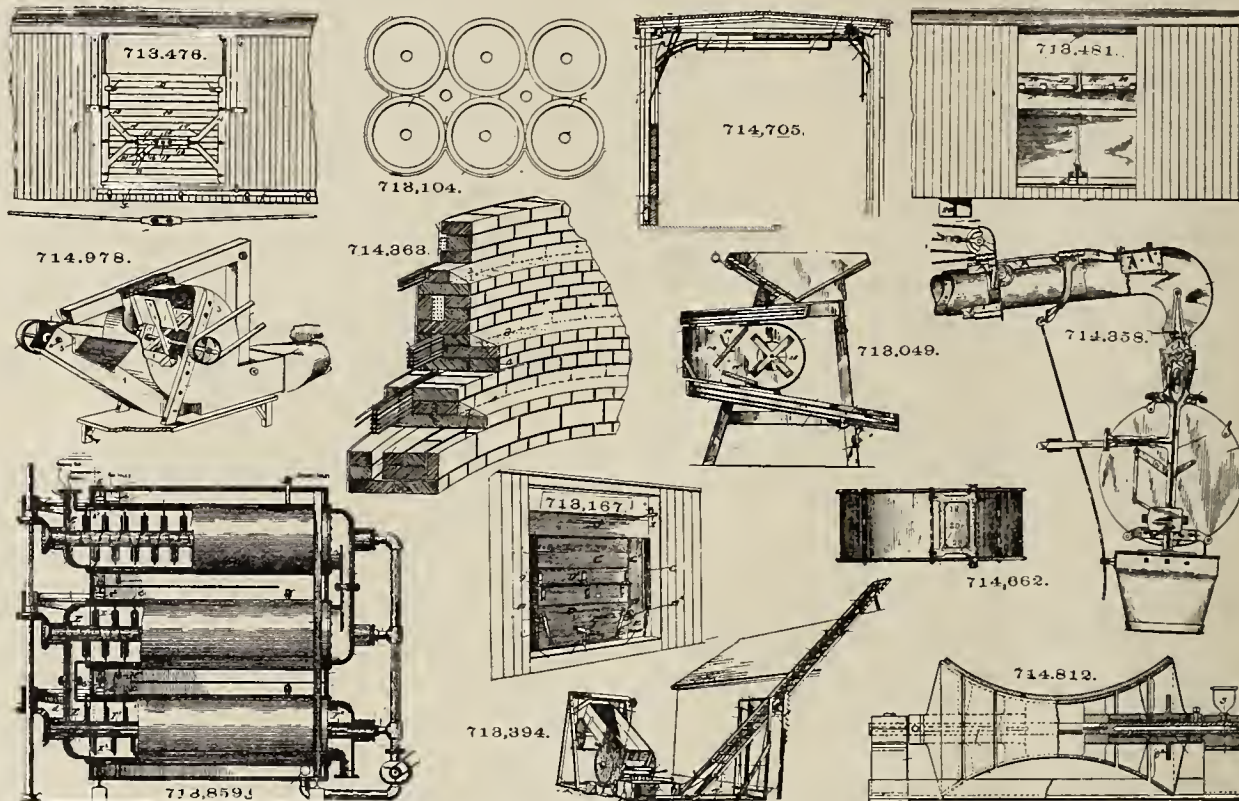
John W. Fulghum has recently removed from Nashville, Tenn., to Memphis, where he has taken a position as manager of the grain department of Shanks, Phillips & Co., wholesale grocers and grain dealers.

The Duff Grain Co., of Nebraska City, Neb., has established an agency at Plattsmouth, Neb., with George E. Sayles in charge. Mr. Sayles will also have charge of the elevators at Oreapolis, Cullom and South Bend, Neb.

Jay Dunwoody, who has been in charge of the St. Anthony and Dakota Elevator Co.'s business at Euclid, Minn., has been succeeded by a Mr. Murray of Minneapolis, and will go to Hot Springs to be treated for hemorrhage of the brain.

W. W. Wood, president of the London Corn Trade Association, was a member of the delegation from the London Chamber of Commerce, which came to this country to be present at the dedication of the New York Chamber of Commerce building.

Edwin Duff, of the Duff Grain Company, of Nebraska City, Neb., was married to Miss Gertrude Musser of Muscatine, Iowa, November 12. Mr. and Mrs. Duff are now in the East and will return to Nebraska City the latter part of this month.



Anderson A. Fowler, of the grain exporting firm of A. A. Fowler & Co., New York, was a visitor to the Kansas City Board of Trade November 29. He was in that city to locate representative Bruce Inman. The firm intends to do a large business in corn.

W. G. McDougal, who is prominently identified with the grain trade, has removed from Des Moines, Ia., to Omaha, Neb., where he is representing the Armour Grain Co., of Chicago, and the Milwaukee Elevator Co., of Milwaukee, with offices at 215 Board of Trade building.

Lincoln Horner, a grain buyer at Kumler, Ill., was found at the bottom of a corn bin in the elevator in an unconscious condition. It is thought that he became ill while at work in the bin, which was empty, and in attempting to climb out became unconscious and fell back. He has recovered.

B. Frank Howard, senior member of the firm of Howard, Bartels & Co., publishers of the Daily Trade Bulletin, completed his fortieth year as a member of the Chicago Board of Trade December 1. For that length of time Mr. Howard has been compiling commercial statistics and has come to be regarded as an authority. He was born in Pennsylvania in 1839 and removed to Chicago in 1858. Four years later he became a member of the Board of Trade. His entire time is devoted to his paper and the accuracy of its quotations are never questioned. Mr. Howard was a delegate from the Chicago Board of Trade to the sessions of the National Board of Trade from 1896 to 1902. September last he represented that board at the investigation of agricultural statistics of the Census Bureau and the Department of Agriculture at Washington.

The Southwestern Iowa Grain Dealers' Association has begun holding its district meetings again.

## LATE PATENTS

Issued on November 11, 1902.

Grain Elevator and Dump.—Harry A. Burgess, Goodland, Ind. Filed Nov. 30, 1901. No. 713,394. See cut.

Fireproof Grain Bin.—Ernest V. Johnson, Chicago, Ill. Filed June 14, 1902. No. 713,104. See cut.

Grain Cleaner and Separator.—James C. Benson, Alcony, Ohio. Filed July 28, 1900. No. 713,049. See cut.

Grain Car Door.—Ben Steine and Cornelius Jones, New Orleans, La. Filed Feb. 20, 1902. No. 713,167. See cut.

Grain Door for Cars.—Silas E. McKinney, Menlo, Kan. Filed Feb. 24, 1902. No. 713,481. See cut.

Grain Car Door.—John Montgomery, Simcoe, Canada. Filed March 10, 1902. No. 713,476. See cut.

Issued on November 18, 1902.

Apparatus for Drying Grains.—Alex. P. Criswell, Chicago, Ill., assignor of one-half to John M. West-erlin and Allan Campbell of the firm of Westerlin

& Campbell, Chicago. Filed June 7, 1902. No. 713,859. See cut.

Issued on November 25, 1902.

Pneumatic Elevator and Weigher.—Chester Bradford and Ridgely B. Hilleary, Indianapolis, Ind. Filed Dec. 18, 1901. No. 714,358. See cut.

Elevator or Storage Bin Construction.—Wm. S. Cleveland and Bernard H. Stahr, Minneapolis, Minn. Filed Feb. 3, 1902. No. 714,363. See cut.

Grain Elevator.—Thos. J. Levy and Mont Anderson, Liberty, Arizona. Filed March 31, 1902. No. 714,203. See cut.

Issued on December 2, 1902.

Grain Door for Cars.—David James and John A. James, Coffeyville, Kan. Filed May 28, 1902. No. 714,705. See cut.

Supporting Roller for Conveyors.—Wm. I. Mann and Norwell C. Neemes, Pittsburg, Pa. Filed March 1, 1902. No. 714,812. See cut.

Door for Housing of Pneumatic Elevators.—Chester Bradford, Indianapolis, Ind. Filed May 17, 1902. No. 714,662. See cut.

Grain Conveyor.—John Vogt, Winesburg, Ohio. Filed Sept. 2, 1902. No. 714,978. See cut.

A correspondent at Decatur says the record for the biggest yield of corn ever known in Macon county is claimed for nine acres grown by Hiram Limings on a farm a quarter of a mile from Maroa. The nine acres yielded 937 bushels at 80 pounds to the bushel. This is not an estimate, but an actual report from the scale tickets, making a yield of a fraction more than 104 bushels to the acre. John Norris has forty acres across the road from Mr. Limings that is expected to yield even more to the acre than the Limings land, and may go 110 bushels to the acre.



## TRANSPORTATION

Boats are offered at Chicago at 3 cents to load and hold corn for spring shipment to Buffalo.

The Canadian Pacific has recently placed seventy new grain cars in operation. They are all of the new 40-ton type.

Belated shippers at Duluth were bidding 3 cents a bushel to Buffalo on vessel room for wheat December 4, but were unable to get boats at any price.

The increased rates on grain and grain products which were to have gone into effect December 8 have been held up and will probably not be applied until January 1.

It is reported that the Arkansas and Choctaw will extend its line from Ashdown, Ark., to Lawton, Okla., where it will connect with the Oklahoma City and Western.

The grain carrying trade on the Pacific Coast is still in a demoralized condition and rates are lower than ever before. It is simply a case of the supply of vessel room exceeding the demand.

Cleveland Bros., grain dealers and millers of Mobile, Ala., shipped the first car of grain over the new Mobile, Jackson and Kansas City Railroad. The car was loaded with corn and was consigned to Hattiesburg, Miss.

As a result of the meeting of the Interstate Commerce Commission at Wichita, Kan., last month, the rates on grain and grain products from Kansas to Texas points were reduced to 2½ to 4 cents per hundred to many points.

A reduction of 20 per cent in the rate on grain has been announced by the Trans-Missouri lines in shipping to Colorado common points from Kansas and Nebraska and reduced local rates have also been made by Colorado roads.

The reconsignment charge matter at St. Louis, Kansas City and St. Joseph has been placed in the hands of State Attorney General E. C. Crow and he has agreed to take it up as soon as possible. He does not speak very hopefully of success.

The Inland Lakes Transportation Co., Ltd., of Collingwood, Ont., the new Canadian steamship company which will put a grain fleet in commission on the lakes with the opening of navigation, has elected its officers. Michael Straus, a grain exporter of Chicago, has been named as vice-president.

The Milwaukee Free Press recently published a table showing a comparison of the freight rates on grain in Wisconsin and Illinois. According to the figures given the C. M. & St. P. and the C. & N. W. charge from 27 to 40 per cent more for hauls to Milwaukee than they do for hauls of similar distances to Chicago.

It is rumored that the St. Louis and San Francisco will extend its line from Oklahoma to Mobile, Ala., to secure a shorter grain route. This will be done by extending the line it has projected from Oklahoma, O. T., through the Indian Territory and down the Red River Valley to Natchez, Miss., across southern Mississippi to Mobile, where it will secure an eastern Gulf port.

The Texas Railroad Commission has issued an order to the effect that rates on wheat between points in Texas, shall not, in common territory exceed 12½ cents on shipments of a single road or two or more roads under the same management, nor exceed 15 cents where shipment is over two or more roads not under the joint control. The milling in transit charge is 5 cents in the former case and 2½ cents in the latter.

Work on the extension of the St. Vincent line to Emerson, Man., to connect with the Canadian Northern is nearing completion. It is rumored that a large amount of wheat will be shipped to Duluth over this line through Crookston, Minn., and it is current gossip that 11,000,000 bushels in elevators along the line of the Canadian Northern will be shipped as soon as the connection at Emerson is made.

The steamer Jesse H. Farwell, which cleared December 5, was the last vessel to carry a cargo of grain from Chicago for the lake navigation season of 1902. The Farwell carried a cargo of 40,000 bushels of corn from Armour D Elevator for Detroit and left the elevator just an hour before the time of withdrawing insurance. The insurance rate on grain cargoes was advanced December 1 to \$1 per \$100, all insurance being withdrawn December 5. The last steamer out of South Chicago was the Wilkinson, which sailed December 5 with a mixed cargo of corn and wheat for Buf-

falo. The close of navigation at Chicago was a disappointment to the shipping interests.

The Canadian Pacific in conjunction with the Minneapolis, St. Paul and Sault Ste Marie and the Northern Pacific put into effect November 17 a special tariff on wheat in carloads to Minneapolis, St. Paul, Minnesota Transfer and Duluth, when loaded in returning foreign cars via the Soo line, via North Portal, Assa., and Glenwood, Minn., from Canadian Pacific stations in the Territories and a few Manitoba points on the Estevan branch of the C. P. R.

South Dakota farmers are discouraged with their corn, much of which is light in weight and in bad condition.

"Immediate shipment" and "five days' shipment" have been interpreted by W. H. Chadwick and R. D. Richardson of the committee on rules of the Chicago Board of Trade as follows: "Immediate" shipment would mean three business days at place of shipment; "Quick shipment" means five days; "Five days' shipment" means just what it says.

Grain has been moving freely from the Canadian northwest toward tide water, but owing to the lack of Canadian bottoms on the lakes, a large percentage of this is finding its way over the Grand Trunk to the American seaboard. Up to the 24th of November there had been marketed on the lines of the Canadian Pacific 20,800,000 bushels of wheat, against 16,000,000 last year. The number of cars moved was 13,500, against 12,200 last year, but the cars this year have a capacity of 100 bushels more than those used last year.

## Miscellaneous & Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

### GRAIN WANTED.

Wanted—Feed barley and new No. 2 and No. 3 rye.

W. H. SMALL & CO., Evansville, Ind.

### GASOLINE ENGINES.

Gasoline engines for sale or exchange for Minnesota or Dakota lands. Address

McDONALD, 36 W. Randolph St., Chicago.

### WANTED.

Position wanted as manager of country elevator. Three years' experience. Address

BOX 304, Plover, Iowa.

### WANTED.

Good mill or elevator for good Iowa farm. Give description and price in first letter. Address

IOWA, Box 12, care "American Elevator and Grain Trade," Chicago, Ill.

### WANTED, SOFT WINTER WHEAT.

We want to correspond with shippers of winter wheat from points on the B. & O. Ry. in Indiana and Ohio.

HARMONY MILLING CO., Harmony, Butler Co., Pa.

### I CAN SELL YOUR BUSINESS.

No matter where it is. Send description, state price and learn how. Established '96. Highest references. Offices in 14 cities.

W. M. OSTRANDER, 1550 North American Bldg., Philadelphia.

### NO MORE MUSTY CORN.

Use Beale's Adjustable Corn Crib Ventilators. Allows you to build cribs 16 to 24 feet wide. Saves 30 per cent in building material. No more musty corn. Write to

N. S. BEALE, Tama, Iowa.

### USE THE BEST.

Sawred advertisers who want results use the columns of the "American Elevator and Grain Trade." Its twenty years' acquaintance with the grain dealers of the country makes it a paying medium for its patrons.

## For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

### FOR SALE.

Large burr, mounted, ready to run, \$25 f. o. b. here.

ROYAL CENTER GRAIN CO., Royal Center, Ind.

### FOR SALE.

Two Smith Lift Dumps, almost new. Will sell for reasonable price.

MATTOON ELEVATOR CO., Mattoon, Ill.

### GASOLINE ENGINES.

New and second-hand gasoline engines for sale. Write for particulars.

LAMMERT & MANN, 157-161 S. Jefferson St., Chicago.

### FOR SALE.

Three new wood boots 18x14 pulley, one new wood boot, 18x13 pulley.

B. S. CONSTANT CO., Bloomington, Ill.

### POWER.

For sale, Corliss Engines, good as new.

Contracts for entire steam installations.

Old plants taken in exchange or bought outright.

THE BONUS CO., 167 Lake st., Chicago.

### SEED CLEANER FOR SALE.

A No. 6 Monitor seed cleaner, made in Silver Creek, N. Y.; in first-class condition. Having gone out of the seed business we want to dispose of same.

PARR & JOHNSTON, 219 South St., Baltimore, Md.

### ELEVATOR FOR SALE.

Elevator and 360 frontage on side track at Mt. Carroll, Ill., for sale to close estate. Capacity 40,000 bushels; gasoline engine and dump. Good opening for right man. For particulars inquire of

N. H. HALDERMAN, Mt. Carroll, Ill.

### RESULTS FOLLOW.

A liner advertisement in the "American Elevator and Grain Trade" will help you sell or rent your elevator, or sell your second-hand machinery. If you want to reach grain dealers, try an advertisement in this department. Results follow.

### TWO INDIANA ELEVATORS.

Two elevators for sale in northern Indiana. One on the main line of the P. F. W. & C. R. R., the other on the Vandalia. Located in good residence towns and in the best grain producing section of Indiana. Address

PLYMOUTH NOVELTY MFG. CO., Plymouth, Indiana.

### FOR SALE CHEAP.

Ore No. 1 Willford's Light-running Roller Mill for cornmeal and feed. Rollers in good condition. never recorrugated. Also one 8-foot double conveyor cornmeal holter; good as new. Both for \$150 f. o. b cars Crawfordsville.

CRABBS & REYNOLDS, Crawfordsville, Ind.

### FOR SALE.

A safe, reliable water power with 16 acres of land. A new 30 horsepower McCormick Wheel, 20-foot head, right in town. Railroad joins the site. A saving of \$5 a day over any other power. This city of 1,600 is noted for its beauty and many advantages.

J. M. CUSSONS, Chatfield, Minn.



**FOR SALE.**

We have a large stock of boilers, engines, steam pumps and pulleys for sale. Write for specifications and prices to

PHILIP SMITH, Sidney, Ohio.

**ENGINE AND BOILER FOR SALE.**

One 45 horsepower slide valve engine, now in use and in good condition. Also one 50-horsepower boiler. Will sell very cheap if taken soon. Address INGRAHAM & BROWAND, Spencer, Ohio.

**SECOND-HAND MACHINERY FOR SALE.**

One No. 8 Knickerbocker Cyclone Dust Collector.  
Four No. 5 Knickerbocker Cyclone Dust Collectors.  
Five No. 4 Knickerbocker Cyclone Dust Collectors.  
One No. 9 Monitor Oat Clipper.

Two No. 9 Monitor Warehouse Receiving Separators.

Two Twin City Succotash Machines, 200 to 250 bushels' capacity.

Two flax machines, 100 to 150 bushels' capacity.

Four 48x8 friction clutch pulleys.

Three 36-inch, 5-groove friction clutch sheaves, 1-inch rope.

One 76-inch, 5-groove friction clutch sheave, 1-inch rope.

One 55-inch double steel plate exhaust fan.

G. T. HONSTAIN, 313 Third St. South, Minneapolis, Minn.

**Burlap Bags!! Grain Bags!!**

ALL SIZES MADE TO ORDER.

W. J. JOHNSTON, 182 Jackson St., Chicago.

**BLAINE-MACKEY-LEE CO.**

Proprietors Scouler Milling Co.'s City Mills,

NORTH EAST, PA.

Quotations wanted on Bran and Mill Feed, Corn, Oats, Rye, Buckwheat and Milling Wheat from small mills and country elevators direct. L. S. & M. S. delivery.

**E. R. Ulrich & Sons,**

**SHIPPERS OF WESTERN GRAIN,**

Especially High Grade White and Yellow Corn.

Elevators along the lines of the following railroads in Central Illinois: WABASH; CHICAGO & ALTON; I. C.; C. P. & St. L. and PAWNEE,

Main Office, 6th Floor, Illinois National Bank Building, SPRINGFIELD, ILLINOIS.

WRITE FOR PRICES DELIVERED.

NO WHEAT FOR SALE.

**ROOFING AND SIDING.****The Garry Iron and Steel Roofing Co.**

168 MERWIN STREET, CLEVELAND, O.

MANUFACTURES



Steel Roofing,  
Corrugated Iron,  
Siding and Metal  
Ceiling.

SEND  
FOR CATALOGUE

**SYKES STEEL ROOFING CO.**

611 So. Morgan Street, Chicago

Makers of FIRE-PROOF WINDOWS



WE manufacture all gauges of corrugated iron, either painted or galvanized. We make Patent Cap Roofing, Roll Cap Roofing, "V" Crimped Roofing, Metal Ceilings, etc., etc. We make a specialty of

**Corrugated Iron and  
Metal Roofing  
For Grain Elevators**

And take contracts either for material alone or job completed. Write us for prices. We can save you money.

**GRAIN RECEIVERS****PEORIA****FRANK HALL & CO.**

SUCCESSORS TO E. S. EASTON & CO.

**Grain and Commission**

324 South Washington Street,

PEORIA, ILLINOIS.

**WARREN & CO.**

**GRAIN**

**Commission Merchants**

ROOMS 7 and 9 CHAMBER OF COMMERCE,  
PEORIA, ILL.

A. G. TYNG, Jr.

D. D. HALL.

**TYNG, HALL & CO.,**

**Grain and Commission  
Merchants,**

ROOMS 33 AND 35 CHAMBER OF COMMERCE,  
PEORIA, ILLINOIS.

**T. A. GRIER & CO.**

PEORIA, ILL.

**RECEIVERS, BUYERS AND SHIPPERS  
OF WHEAT, CORN, OATS AND RYE**

On account of the peculiar character of the season, grain is largely off grade and we advise consignments.

WE GIVE ALL CONSIGNMENTS CAREFUL ATTENTION

ESTABLISHED 1875.

**P. B. & C. C. MILES**

**Grain Commission Merchants**

**BUYERS AND SHIPPERS**

36-37 Chamber of Commerce,

PEORIA, ILL.

**PEORIA****VAN TASSEL & BUNN**

**GRAIN  
COMMISSION  
MERCHANTS**

**Track Buyers and Shippers**

ROOMS 44 and 46 CHAMBER OF COMMERCE PEORIA, ILL.

**Mills Brothers**

**Grain Commission Merchants**

Consignments Solicited

47 Chamber of Commerce, PEORIA, ILL.

**LOUISVILLE**

THE

**JOHN R. WATTS SEED CO.**

(INCORPORATED)

LOUISVILLE, KENTUCKY

**Clover Seed Timothy Seed**

SEND US YOUR SAMPLES  
SEND US YOUR CONSIGNMENTS

**PHILADELPHIA****L. F. MILLER & SONS,**

RECEIVERS AND SHIPPERS OF

**Grain, Feed, Seeds, Hay, Etc.**

OFFICE 2931 N. BROAD ST., PHILADELPHIA, PA.

CONSIGNMENTS SOLICITED. Special attention given to the handling of CORN AND OATS.

REFERENCES..... { Manufacturers' National Bank, Philadelphia, Pa.  
Union National Bank, Westminster, Md.

**MINNEAPOLIS****F. H. PEAVEY & CO.,**

MINNEAPOLIS,

GRAIN RECEIVERS.

Consignments Solicited.

MINN.

MILLING WHEAT A SPECIALTY.

**E. A. BROWN & CO.**

**Grain Commission Merchants.**

CONSIGNMENTS SOLICITED.

Choice Milling Wheat a Specialty. Orders for Bran and Feeds filled promptly.

922 Chamber of Commerce, MINNEAPOLIS, MINN.

J. L. MCCAULL

D. WEBSTER

R. A. DINSMORE

**The McCaull-Webster  
Grain Company**

COMMISSION  
MERCHANTS.

MINNEAPOLIS,  
MINN.

J. R. WARFIELD, Pres. WM. GRIFFITHS, Vice-Pres. and Mgr.  
C. D. TEARSE, Sec'y and Treas.

**BROOKS-GRIFFITHS CO.,  
GRAIN COMMISSION**

OFFICES: Consignments and Orders for  
CHICAGO MILWAUKEE Future Delivery Solicited.  
MINNEAPOLIS DULUTH

PRIVATE WIRES-CHICAGO AND NEW YORK.

511-514 New Chamber of Commerce, Minneapolis, Minn.

**CINCINNATI**

JULIUS FLEISCHMANN, President CASPER H. ROWE, Secretary  
W. W. GRANGER, Manager

**THE UNION GRAIN & HAY CO.**

**Shippers and Receivers,**

CINCINNATI, O.



# GRAIN RECEIVERS

## TOLEDO

ESTABLISHED 1846

### C. A. KING & CO.

THE GOLDEN RULE

GRAIN AND CLOVER SEED DEALERS  
OF TOLEDO, OHIO

SPECIAL MARKET AND CROP REPORTS FREE.

BE FRIENDLY.

WRITE OCCASIONALLY.

ESTABLISHED 1876

### W. A. RUNDELL & CO.

GRAIN and SEEDS.

We Buy Delivered Toledo or F. O. B. Your Station.

CONSIGNMENTS and FUTURES GIVEN SPECIAL ATTENTION.

Ask for our "Daily Market Letter and Track Bids."  
Correspondence requested.

33 Produce Exchange, - TOLEDO, OHIO

## REYNOLDS BROS.

TOLEDO, O.

### Buy and Sell Grain.

SELL US YOURS.

If you don't get our bids, ask for them. Consignments always welcome. Consign us yours.

J. F. ZAHM. F. W. JAEGER. F. MAYER  
ESTABLISHED 1879.

## J. F. ZAHM & CO.,

GRAIN and SEEDS,  
TOLEDO, OHIO.

MEMBERS: Toledo Produce Exchange  
Chicago Board of Trade,  
New York Produce Exchange.Handling consignments and filling orders for  
futures OUR SPECIALTY.

SEND FOR OUR RED LETTER.

## BUFFALO

### W. W. ALDER

Consign Your Grain and Feed  
to a Strictly

COMMISSION MERCHANT

OUR SPECIALTIES:—Quick Returns and Careful  
Guarding of our Shippers' Interests.

Correspondence Invited.

Write for Buffalo Market Letter

81 BOARD TRADE, BUFFALO, N. Y.

### HENRY D. WATERS

GRAIN COMMISSION  
MERCHANT

CONSIGNMENTS  
SOLICITED54 BOARD OF TRADE  
BUFFALO, N. Y.

## BALTIMORE

SMITH-GAMBRILL CO.,

Chamber of Commerce, Baltimore, Md.,

GRAIN COMMISSION

RECEIVERS AND EXPORTERS.

RICHARD GAMBRILL, Western Manager, Chicago, Ill.

### Thos. H. Botts & Co.

FLOUR, GRAIN AND GENERAL  
Commission Merchants

214 Spears Wharf

213 Patterson Street

BALTIMORE, MD.

REFERENCES—First National Bank, C. Morton Stewart & Co.,  
I. M. Parr & Son, BALTIMORE; Dunlop Mills, Warner, Moore  
& Co., RICHMOND, VA.

### KIRWAN BROS. GRAIN CO.

BALTIMORE, MD.

BUYERS AND RECEIVERS

## GRAIN AND HAY

We solicit your consignments.

## PITTSBURG

### C. A. FOSTER,

McCance Block, Cor. Seventh Ave.  
and Smithfield St., Pittsburgh, Pa.

Established 1878

### Wholesale Grain, Hay and Mill Feed

CONSIGNMENTS SOLICITED.

Reference: The Colonial Trust Co., Pittsburgh, Pa.

DANIEL McCAFFREY'S SONS,

### Leading Hay Dealers

PITTSBURG, PA.

Consignments Solicited.

Reference: Duquesne National Bank

Established 1867.

### GEIDEL & CO.,

### Leading Mill Feed Dealers, GRAIN, HAY AND STRAW.

MEMBERS OF  
National Hay Association,  
Pittsburg Grain and Flour Exchange.

PITTSBURG, PA.

WE USE ROBINSON'S CIPHER.

### D. G. STEWART,

PITTSBURGH, PA.

... WHOLESALE DEALER IN ...

### Grain, Hay and Mill Feed

Proprietor Iron City Grain Elevator.

CONSIGNMENTS SOLICITED.

## NEW YORK CITY

### BROOKLYN HAY & GRAIN CO.

HAY, STRAW AND GRAIN

COMMISSION MERCHANTS

ON ALL MARKETS IN NEW YORK HARBOR

Office: Borough of Brooklyn, New York

### GEO. N. REINHARDT & CO.

MELROSE STATION, NEW YORK CITY.



We sell on Commission and buy direct.

HAY, GRAIN AND FEED.

Storage capacity 8,000 bales, 30,000 bushels.  
Let us know what you have to offer.

WRITE, WIRE OR PHONE

## THE PADDOCK-HODGE CO.

Operating Wabash Elev. 4.

GRAIN

Michigan Central A.

Total Capacity, 200 cars daily. Storage Capacity, 1,500,000 bushels. Clipping Oats 50,000 bushels daily. No Switching Charges from any road. Our bids will reach you daily, no matter where you're located. Advise if not receiving them.  
TOLEDO, OHIO.

## MILWAUKEE

LEMAN BARTLETT

O. Z. BARTLETT

### L. Bartlett & Son,

GRAIN AND PRODUCE COMMISSION  
... MERCHANTS ...

### BARLEY A SPECIALTY

Room 23 Chamber of Commerce Bldg.  
MILWAUKEE, WIS.Careful attention given to orders from  
Brewers, Malsters and Millers.

## ST. LOUIS

### DANIEL P. BYRNE & CO.,

Successors to

### REDMOND CLEARY COM. CO.

Established 1844.

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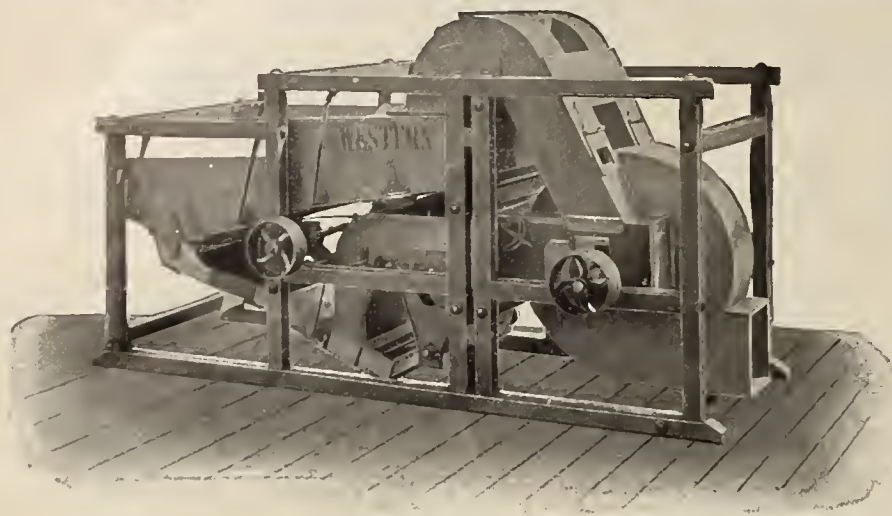
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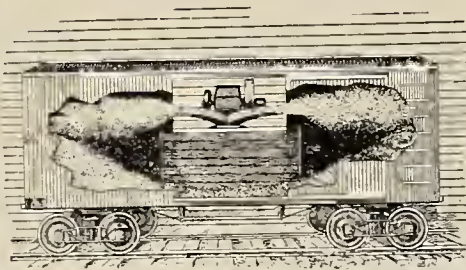
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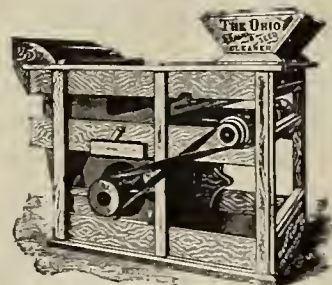
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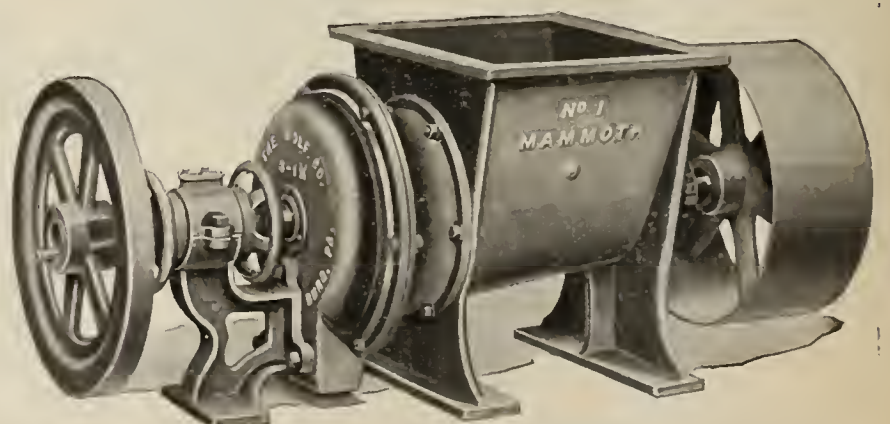
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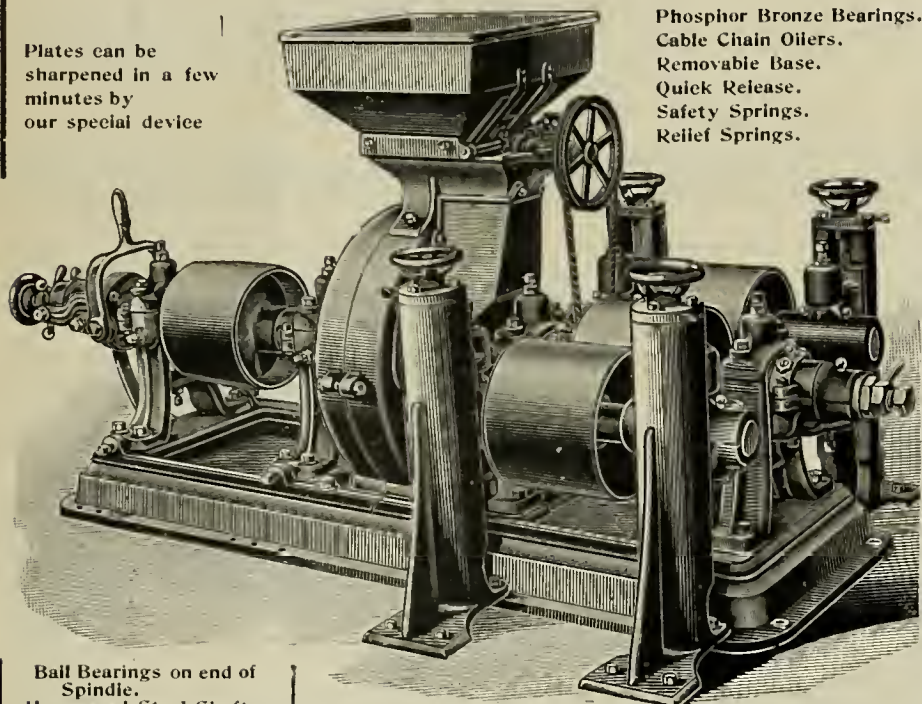
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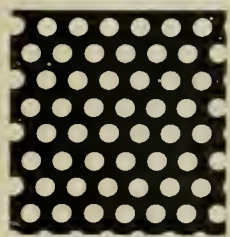
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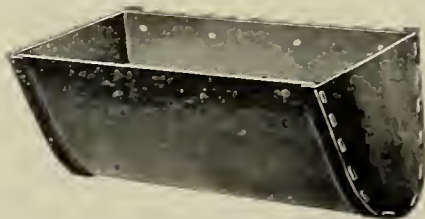
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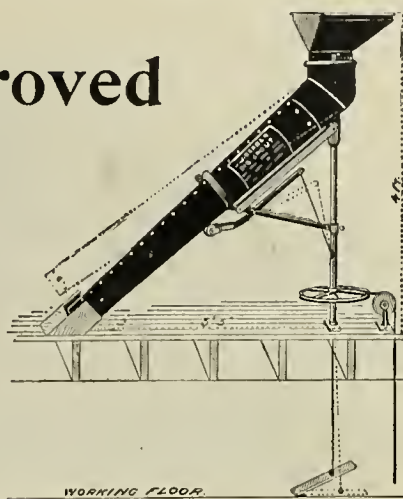
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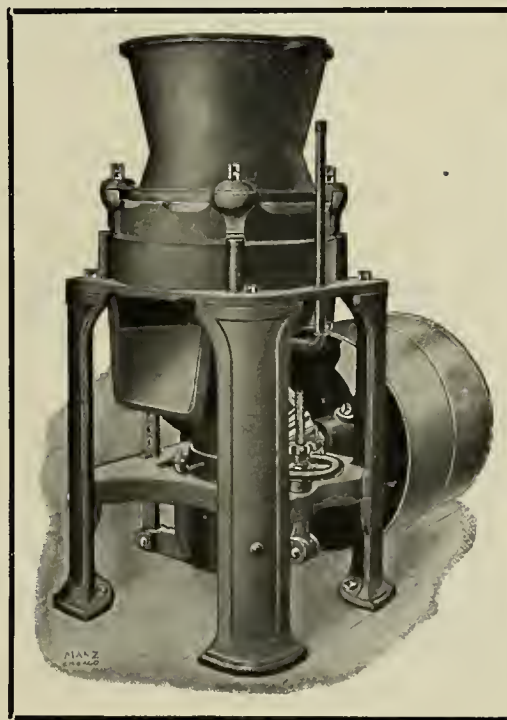
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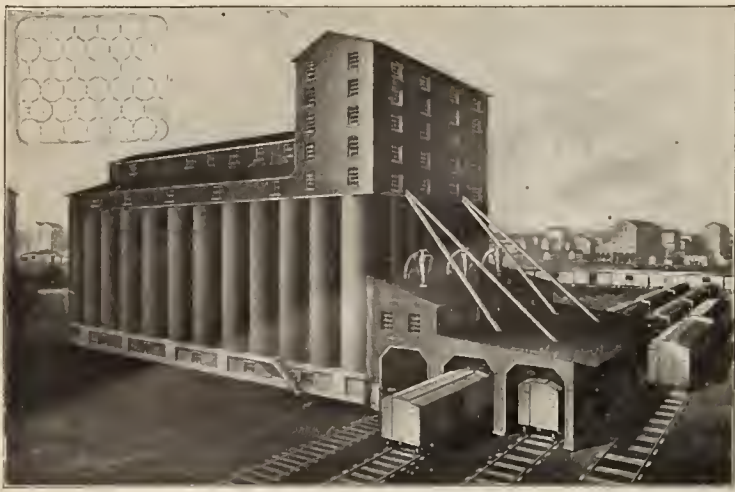
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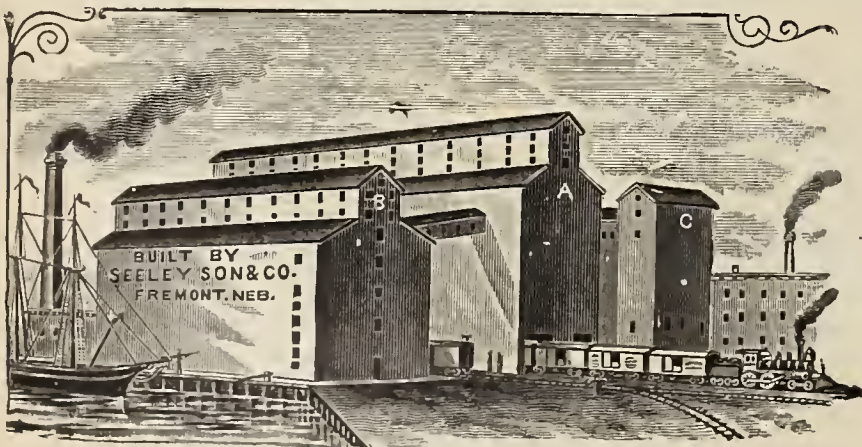
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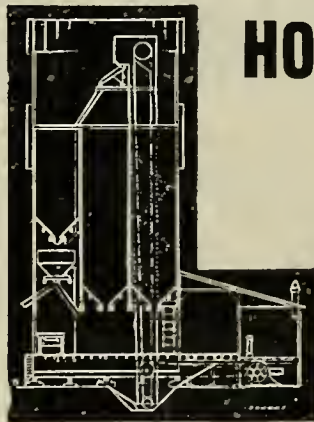
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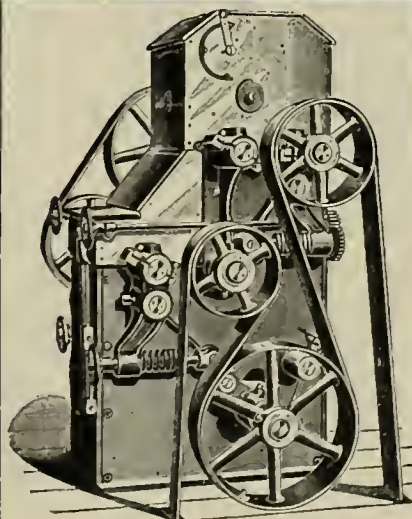


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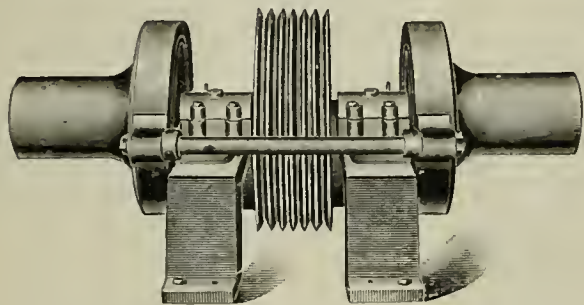
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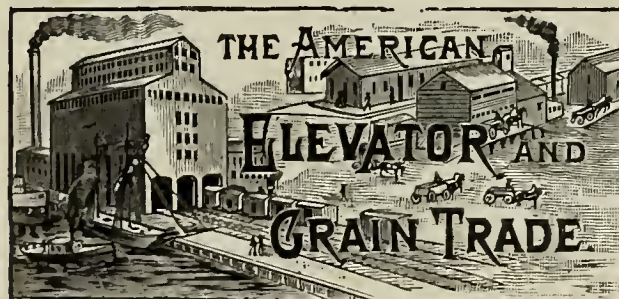
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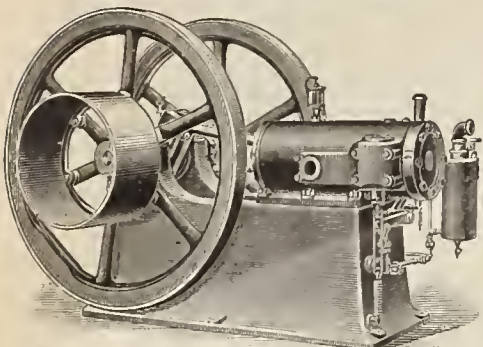
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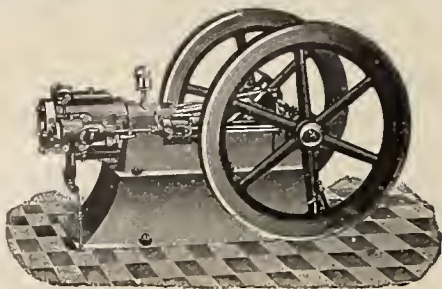


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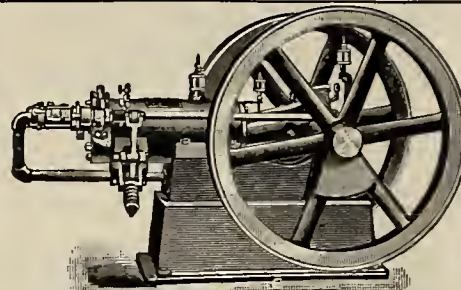
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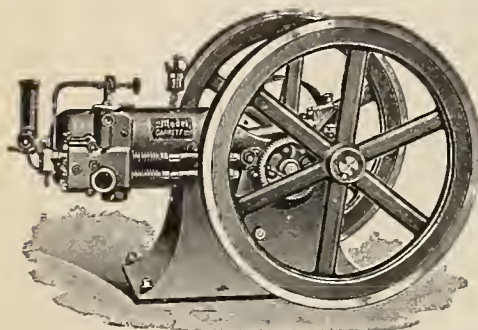
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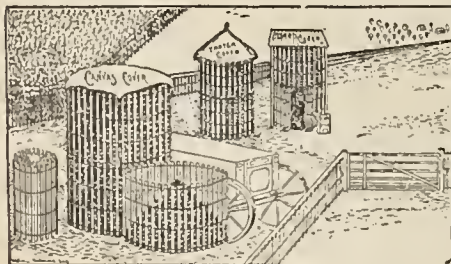


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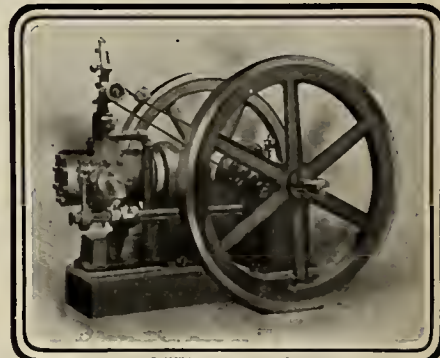
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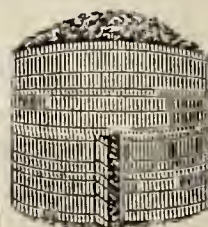
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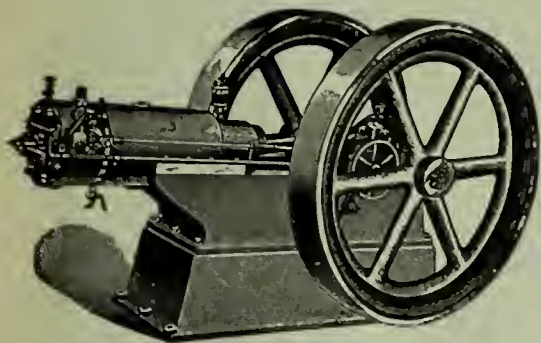
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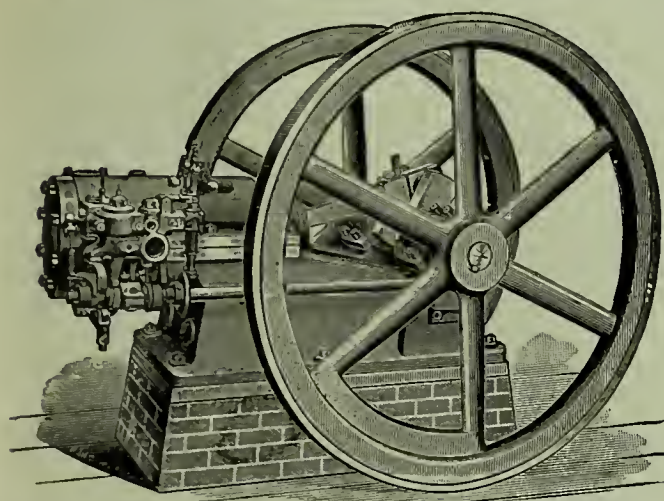
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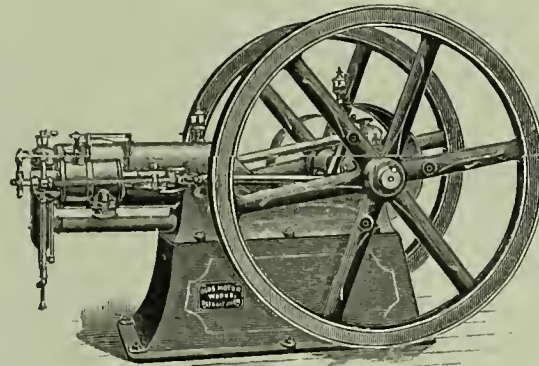
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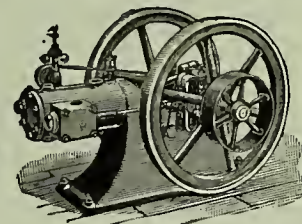
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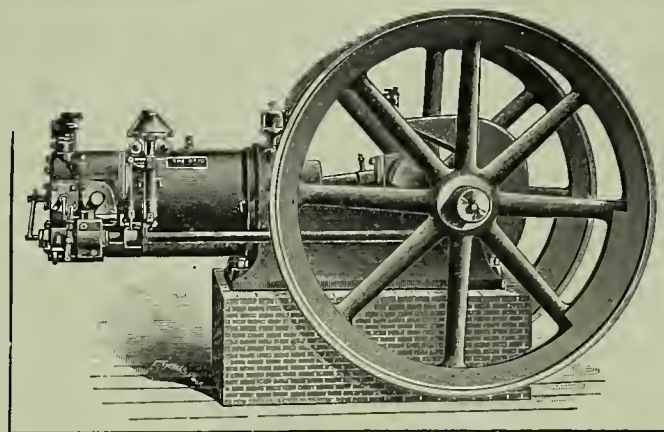
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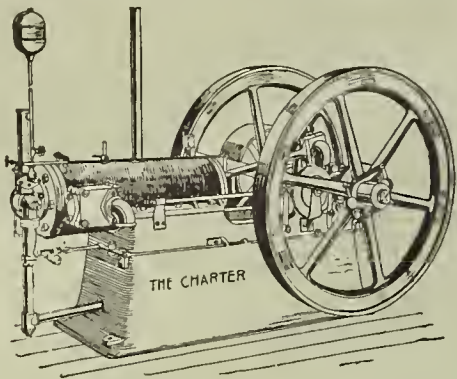
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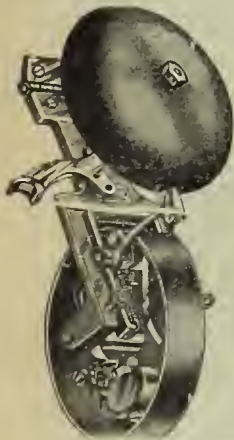
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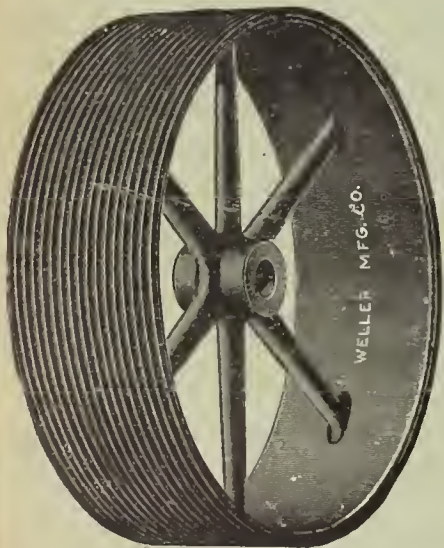
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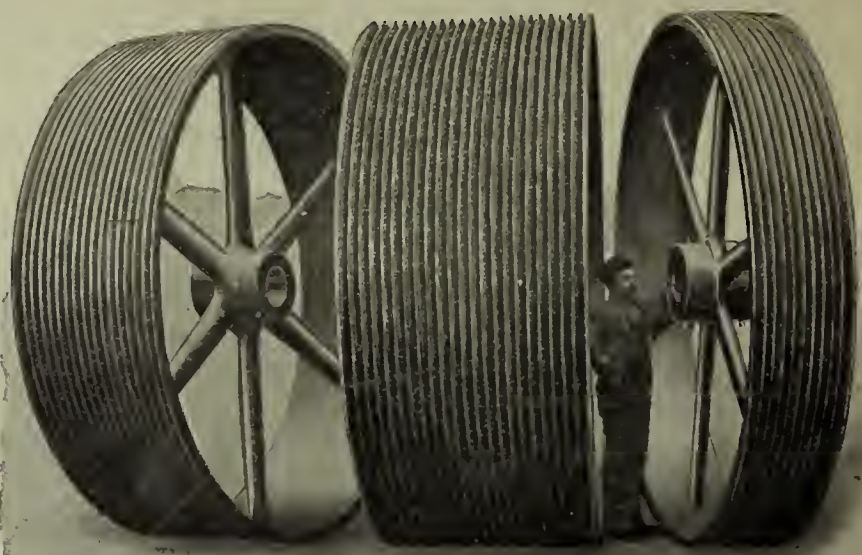


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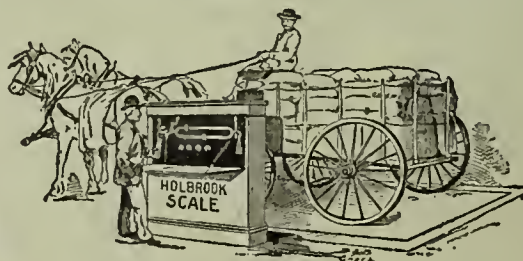
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